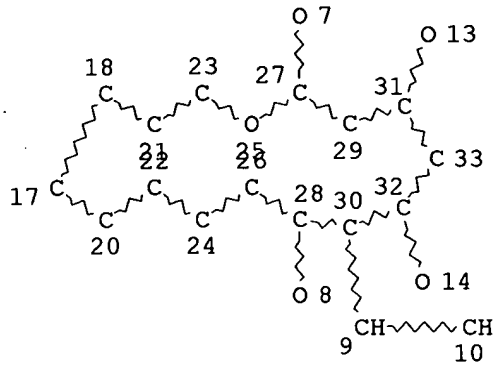
=> d l4
L4 HAS NO ANSWERS
L4 STR



NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 22

STEREO ATTRIBUTES: NONE

=> s l4 ful
FULL SEARCH INITIATED 09:10:08 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 63107 TO ITERATE

100.0% PROCESSED 63107 ITERATIONS 770 ANSWERS
SEARCH TIME: 00.00.01

L5 770 SEA SSS FUL L4

=> fil caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	165.32	179.47

FILE 'CAPLUS' ENTERED AT 09:10:14 ON 23 AUG 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 23 Aug 2005 VOL 143 ISS 9
FILE LAST UPDATED: 22 Aug 2005 (20050822/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

```
=> s 15
L6          19 L5

=> d bib abs 1-19

L6   ANSWER 1 OF 19  CAPLUS  COPYRIGHT 2005 ACS on STN
AN   2005:692087  CAPLUS
TI   Use of epothilones in the treatment of neuronal connectivity defects such
     as schizophrenia and autism
IN   Andrieux, Annie; Job, Didier; Schweitzer, Annie; Hoefle, Gerhard
PA   Institut National de la Sante et de la Recherche Medicale INSERM, Fr.
SO   Eur. Pat. Appl., 18 pp.
     CODEN: EPXXDW
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.          DATE
     --------------      ----   --------    -------------------      --------
PI   EP 1559447           A1    20050803    EP 2004-290249           20040130
        R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     WO 2005075023        A1    20050818    WO 2005-IB217            20050128
        W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
            CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
            GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
            LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
            NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
            TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
        RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
            AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
            EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,
            RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
            MR, NE, SN, TD, TG
PRAI EP 2004-290249       A     20040130
AB   The present invention is about the use of at least one epothilone or
     derivative thereof as an active ingredient for manufacturing a medicament for use in
     the treatment of disease(s) involving a neuronal connectivity defect such
     as schizophrenia or autism.
RE.CNT  3     THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6   ANSWER 2 OF 19  CAPLUS  COPYRIGHT 2005 ACS on STN
AN   2004:490724  CAPLUS
DN   141:38480
TI   Preparation of epothilone-saccharide conjugates for site specific delivery
     in the treatment of proliferative diseases
IN   Bosslet, Klaus; Hess-Stumpp, Holger; Hoffmann, Jens; Klar, Ulrich;
     Rotgeri, Andrea
PA   Schering A.-G., Germany
SO   PCT Int. Appl., 123 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.          DATE
     --------------      ----   --------    -------------------      --------
PI   WO 2004050089        A1    20040617    WO 2003-EP13780          20031205
        W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
            CN, CO, CR, CU, CZ, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,
            GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK,
            LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ,
            OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
            TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
        RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
            BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
            ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,
```

TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

	DE 10256982	A1	20040624	DE 2002-10256982	20021205
	US 2004167083	A1	20040826	US 2003-728098	20031205
PRAI	DE 2002-10256982	A	20021205		
	US 2002-431197P	P	20021206		

OS MARPAT 141:38480
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Conjugates of formula I [R1, R1a, R2, R2a, R3, R4. R4a = H, alkyl, aryl, arylalkyl; R1R1a, R2R2a, R4R4a = alkylene; R5 = H, alkyl, aryl, (substituted) CO2H, (substituted) CH2OH, CN, etc.; R6R7 = H, bond, O, NH, alkyl-N, CH2; D-E = CH2CH2, CH=CH, C.tplbond.C, CH(OH)-CH(OH), etc.; G = O, CH2; W = aromatic radical, CHO, etc.; Z = O, (substituted) OH; A-Y = O-CO, O-CH2, NH-CO, etc.; L1, L2, L3 = H, COCl, CSCl, (substituted) CO-O-phenoxy-saccharide, etc.] with epothilones and epothilone derivs. (as effectors) with suitable saccharides or saccharide derivs. (as recognition units) are described. Their production is carried out by the recognition units being reacted with suitable linkers, and the compds. that are produced are conjugated to the effectors. The pharmaceutical use of the conjugates for treating proliferative or angiogenesis-associated processes is described. Thus, II was prepared in several steps.

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

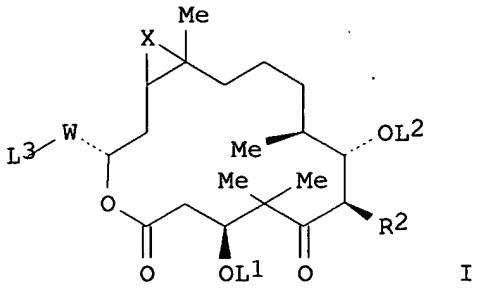
L6 ANSWER 3 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:120722 CAPLUS
DN 140:181251
TI Preparation of new epothilone peptide effector conjugates for pharmaceutical use in the treatment of proliferative or angiogenesis associated disease processes
IN Berger, Markus; Siemeister, Gerhard; Klar, Ulrich; Willuda, Joerg; Menrad, Andreas; Bosslet, Klaus
PA Schering AG, Germany
SO PCT Int. Appl., 148 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004012735	A2	20040212	WO 2003-EP8483	20030731
	WO 2004012735	A3	20040527		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	DE 10234975	A1	20040212	DE 2002-10234975	20020731
	DE 10305098	A1	20040819	DE 2003-10305098	20030207
	CA 2492437	AA	20040212	CA 2003-2492437	20030731
	EP 1524979	A2	20050427	EP 2003-743752	20030731
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	BR 2003013043	A	20050614	BR 2003-13043	20030731
PRAI	DE 2002-10234975	A	20020731		
	DE 2003-10305098	A	20030207		
	US 2003-451673P	P	20030305		

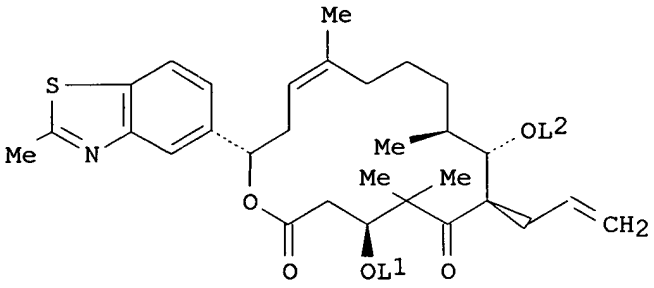
WO 2003-EP8483 W 20030731

OS MARPAT 140:181251

GI



I



II

AB Preparation of epothilone derivs., such as I (R2 = alkyl, alkenyl, alkynyl, aryl, etc.; L1, L2 = carboxyl, carbamoyl, carbonic linking group with a terminal group, such as maleimido, suitable for forming a sulfide link with a bio. mol.; L3 = heteroaryl, such as thiazol-4-yl; W = alkenylene linking group; or L3W = heteroaryl, such as benzothiazol-5-yl; X = O, bond), as effectors linked with suitable biomols. as recognition units was described (no biol. testing data was presented). Production of the epothilone conjugates was carried out by the effectors being reacted with suitable linkers, and the compds. that were produced were conjugated to biomol. recognition units. These conjugates are claimed for use in the treatment of proliferative or angiogenesis-associated disease processes, such as tumors, inflammatory diseases, neurodegenerative diseases, such as multiple sclerosis and Alzheimer's disease, and rheumatoid arthritis. Thus, epothilone derivative II [L1 = 3-(2,5-dioxo-2,5-dihydropyrrol-1-yl)-1-Pr, L2 = H] was prepared via a carbamoylation of silylated epothilone I (L1 = H, L2 = SiMe2CMe3) with 3-(2,5-dioxo-2,5-dihydropyrrol-1-yl)-1-propylisocyanate and subsequent desilylation.

L6 ANSWER 4 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:117139 CAPLUS

DN 140:181250

TI Preparation of new epothilone peptide effector conjugates for pharmaceutical use in the treatment of proliferative or angiogenesis associated disease processes

IN Berger, Markus; Klar, Ulrich; Siemeister, Gerhard; Willuda, Joerg; Menrad, Andreas; Bosslet, Klaus

PA Schering AG, Germany

SO Ger. Offen., 43 pp.
CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 2

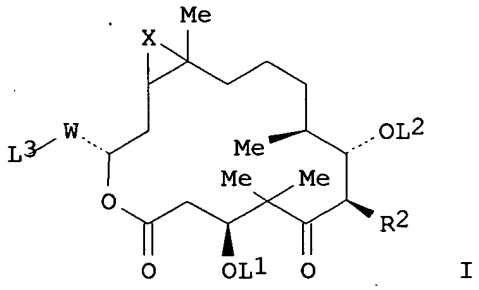
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 10234975	A1	20040212	DE 2002-10234975	20020731
	CA 2492437	AA	20040212	CA 2003-2492437	20030731
	WO 2004012735	A2	20040212	WO 2003-EP8483	20030731
	WO 2004012735	A3	20040527		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

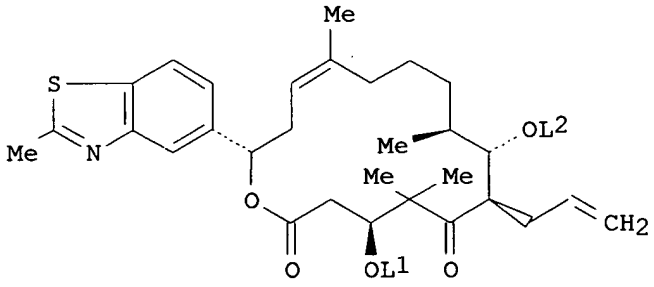
US 2005026971	A1	20050203	US 2003-631011	20030731
EP 1524979	A2	20050427	EP 2003-743752	20030731
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2003013043	A	20050614	BR 2003-13043	20030731
PRAI DE 2002-10234975	A	20020731		
DE 2003-10305098	A	20030207		
US 2003-451673P	P	20030305		
WO 2003-EP8483	W	20030731		

OS MARPAT 140:181250

GI



I



II

AB Preparation of epothilone derivs., such as I (R2 = alkyl, alkenyl, alkynyl, aryl, etc.; L1, L2 = carboxyl, carbamoyl, carbonic linking group with a terminal group, such as maleimido, suitable for forming a sulfide link with a bio. mol.; L3 = heteroaryl, such as thiazol-4-yl; W = alkenylene linking group; or L3W = heteroaryl, such as benzothiazol-5-yl; X = O, bond), as effectors linked with suitable biomols. as recognition units was described (no biol. testing data was presented). Production of the epothilone conjugates was carried out by the effectors being reacted with suitable linkers, and the compds. that were produced were conjugated to biomol. recognition units. These conjugates are claimed for use in the treatment of proliferative or angiogenesis-associated disease processes, such as tumors, inflammatory diseases, neurodegenerative diseases, such as multiple sclerosis and Alzheimer's disease, and rheumatoid arthritis. Thus, epothilone derivative II [L1 = 3-(2,5-dioxo-2,5-dihydropyrrol-1-yl)-1-Pr, L2 = H] was prepared via a carbamoylation of silylated epothilone I (L1 = H, L2 = SiMe2CMe3) with 3-(2,5-dioxo-2,5-dihydropyrrol-1-yl)-1-propylisocyanate and subsequent desilylation.

L6 ANSWER 5 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2003:719306 CAPLUS
DN 139:240340
TI Use of epothilones in the treatment of brain diseases associated with proliferative processes
IN Lichtner, Rosemarie; Rotgeri, Andrea; Klar, Ulrich; Hoffmann, Jens; Buchmann, Bernd; Schwede, Wolfgang; Skuballa, Werner
PA Schering A.-G., Germany
SO PCT Int. Appl., 53 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2003074053	A1	20030912	WO 2003-EP2085	20030228
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1340498	A1	20030903	EP 2002-4745	20020301
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
CA 2477403	AA	20030912	CA 2003-2477403	20030228
EP 1480643	A1	20041201	EP 2003-743360	20030228
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2003008154	A	20050104	BR 2003-8154	20030228
PRAI EP 2002-4745	A	20020301		
US 2002-361062P	P	20020301		
WO 2003-EP2085	W	20030228		

OS MARPAT 139:240340
AB The invention provides the use of an Epothilone, which shows an average distribution coefficient between plasma and brain of 0.3 to 1.5 in the mouse i.v. bolus injection assay, for the preparation of a medicament for the treatment of a brain disease associated with proliferative processes.
RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 6 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2003:693140 CAPLUS
DN 139:191465
TI Use of epothilones in the treatment of brain diseases associated with proliferative processes
IN Lichtner, Rosemarie; Rotgeri, Andrea; Buchmann, Bernd; Hoffmann, Karin; Klar, Ulrich; Schwede, Wolfgang; Skuballa, Werner
PA Schering Aktiengesellschaft, Germany
SO Eur. Pat. Appl., 27 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 1340498	A1	20030903	EP 2002-4745	20020301
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
CA 2477403	AA	20030912	CA 2003-2477403	20030228
WO 2003074053	A1	20030912	WO 2003-EP2085	20030228
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,				

GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA,
UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF,
BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

	US 2004019088	A1	20040129	US 2003-375043	20030228
	EP 1480643	A1	20041201	EP 2003-743360	20030228
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	BR 2003008154	A	20050104	BR 2003-8154	20030228
PRAI	EP 2002-4745	A	20020301		
	US 2002-361062P	P	20020301		
	WO 2003-EP2085	W	20030228		

OS MARPAT 139:191465

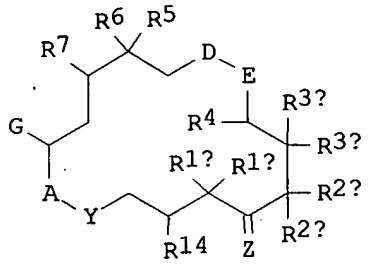
AB The invention provides the use of an epothilone, which shows an average distribution coefficient between plasma and brain of 0.3-1.5 in the mouse i.v. bolus injection assay, for the preparation of a medicament for the treatment of a brain disease associated with proliferative processes.

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

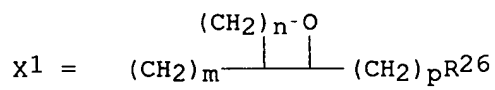
L6 ANSWER 7 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2002:157050 CAPLUS
DN 136:216592
TI Procedures for the production of 12,13-cyclopropylepothilone derivatives, as well as for their use in pharmaceutical preparations
PA Schering Ag, Germany
SO Ger. Offen., 64 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

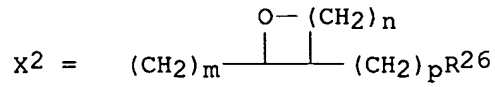
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 10041470	A1	20020228	DE 2000-10041470	20000818
PRAI	DE 2000-10041470		20000818		

OS CASREACT 136:216592; MARPAT 136:216592
GI



I





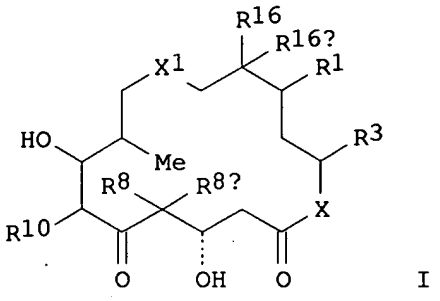
AB The present invention describes new 6-alkenyl- and 6-alkynylepothilone derivs., e.g., I [R1a, R1b = H, C1-10-alkyl, aryl, C7-20-aralkyl; R1aR1b = (CH2)r, CH2OCH2; r = 1 - 5; R2a = H, C1-10-alkyl, aryl, C7-20-aralkyl, (CH2)m-C.tplbond.C-(CH2)pR26, (CH2)m-C:C-(CH2)pR26, X1, X2; n = 0 - 5; p = 0 - 3; m = 0 - 4; R2b = (CH2)m-C.tplbond.C-(CH2)pR26, (CH2)m-C:C-(CH2)pR26, X1, X2; R3a = H, C1-10-alkyl, aryl, C7-20-aralkyl; R3b = O-protecting group; R4 = H, C1-10-alkyl, aryl, C7-20-aralkyl, halogen, OH, O-protecting group, CN; R5 = H, C1-10-alkyl, aryl, C7-20-aralkyl, (CH2)s-T; S = 1 - 4; T = OH, O-protecting group, halogen; R6R7 = C(R33)2, NR32 AY = OC(:O), OCH2, CH2C(:O), NR29C(:O), NR29SO2; DE = CH2CH2, CH2O, OCH2; G = X:CR8-, bicyclic or tricyclic aryl; X = O, (O-alkyl)2, etc.; Z = H, H,OH, H,O-protective group; R8 = H, halogen, CN, C1-20-alkyl, aryl, C7-20-aralkyl; R14 = H, OH, halogen, O-SO2-alkyl, O-SO2-aryl, O-SO2-aralkyl; R26 = H, C1-10-alkyl, aryl, C7-20-aralkyl, C1-10-acyl, OH, O-protecting group; R29 = H, C1-20-alkyl; R32 = H, C1-4-alkyl, C1-4-acyl; R33 = H, halogen], which interact with tubulins by stabilizing the formed microtubulins (no data). I are able specifically to affect cell division and are suitable, for example for the treatment of malignant tumors ovarial -, stomach -, colon -, adeno -, chest -, lungs -, head and neck carcinoma, malignant melanoma, acute lymphocytic and myelocytic leukemia. In addition I are suitable for the anti-angiogenesis therapy as well as for the treatment of chronic ignitable illnesses (psoriasis, arthritis). For the avoidance of uncontrolled cell rampant growths on as well as the better compatibility of medical implants I can be up and/or brought into polymers materials. According to invention, I can be used alone or for the achievement of additive or synergistic effects in combination with further principles and substance classes applicable in the tumor therapy. Exptl. data from patents PCT/EP00/01333 and PCT/IB00/00657 are reproduced here.

L6 ANSWER 8 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2001:780370 CAPLUS
DN 135:331294
TI Preparation of epothilone derivatives for pharmaceutical use in the treatment of cancer
IN Buchmann, Bernd; Klar, Ulrich; Skuballa, Werner; Schwede, Wolfgang; Hoffmann, Jens; Lichtner, Rosemarie
PA Schering A.-G., Germany
SO Ger. Offen., 42 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

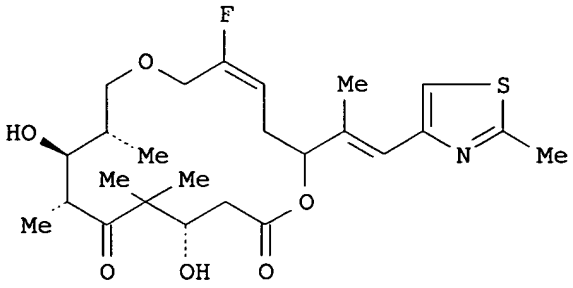
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 10020517	A1	20011025	DE 2000-10020517	20000419
	WO 2001081342	A2	20011101	WO 2001-EP4552	20010419
	WO 2001081342	A3	20020510		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	EP 1276740	A2	20030122	EP 2001-936262	20010419
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	JP 2003531207	T2	20031021	JP 2001-578432	20010419
	NO 2002005029	A	20021018	NO 2002-5029	20021018
	US 2004058969	A1	20040325	US 2002-257925	20021018
PRAI	DE 2000-10020517	A	20000419		
	WO 2001-EP4552	W	20010419		

OS MARPAT 135:331294

GI



I



II

AB Epothilones, such as I [R3 = heteroaryl, heteroarylalkenyl, heteroarylhaloalkenyl,etc.; R8, R8a = H, alkyl, arylalkyl; R8R8a = alkylene, heteroalkene; R10 = H, alkyl, alkenyl, alkynyl; R1R16a = bond, O; R16 = H, CN, alkyl, halogen; X = O, NH; X1 = O, CH2], were prepared for a variety of therapeutic uses, such as treatment of malignant tumors, proliferative diseases, leukemia, and chronic inflammatory diseases. Thus, epothilone II was prepared via a multistep synthetic sequence starting from (3S)-dihydro-3-hydroxy-4,4-dimethyl-2(3H)-furanone, L-(-)-malic acid, and [(2-methyl-4-thiazolyl)methyl]phosphonic acid di-Et ester. Pharmaceutical formulations of the prepared oxa-epothilones were discussed, but specific biol. activity data was not presented.

L6 ANSWER 9 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2001:729040 CAPLUS
DN 136:95676
TI Subcellular distribution of epothilones in human tumor cells
AU Lichtner, R. B.; Rotgeri, A.; Bunte, T.; Buchmann, B.; Hoffmann, J.; Schwede, W.; Skuballa, W.; Klar, U.
CS Research Laboratories of Schering AG, Berlin, 13342, Germany
SO Proceedings of the National Academy of Sciences of the United States of America (2001), 98(20), 11743-11748
CODEN: PNASA6; ISSN: 0027-8424
PB National Academy of Sciences
DT Journal
LA English
AB Epothilones are a new class of natural and potent antineoplastic agents that stabilize microtubules. Although 12,13-epoxide derivs. are potent antiproliferative agents, the activities of the corresponding 12,13-olefin analogs are significantly decreased. These data were confirmed for two new analogs, 6-propyl-EpoB (pEB) and 6-propyl-EpoD (pED), in comparison with the natural compds. EpoB/EpoD, by using human A431, MCF7, and MDR1-overexpressing NCl/Adr cells. By using tritiated pEB/pED, compound uptake, release, and nuclear accumulation were investigated in A431 and NCl/Adr cells. In these cells, epothilones can principally be recognized and exported by verapamil-sensitive efflux pumps, which are not identical to MDR1. The degree of export depends on the structure, olefin vs. epoxide-analog, and also on the intracellular drug concentration The accumulation of pED used at 3.5 or 70 nM, resp., was increased in the presence of 10 μM Verapamil in both cell lines 2- to 8-fold. In contrast, the intracellular levels of pEB were affected by Verapamil only at 3.5 nM pEB in NCl/Adr (2-fold) and not in A431 cells. In addition, strong

nuclear accumulation was observed for pEB (40-50%) but not paclitaxel or pED (5-15%) in both cell lines. Our study suggests that differences in growth inhibitory efficacy between epoxide and olefin analogs may be based on different mechanisms of drug accumulation and subcellular distribution.

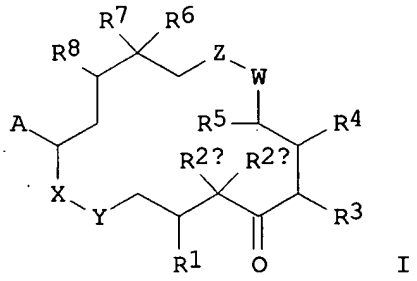
RE.CNT 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 10 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2001:676638 CAPLUS
DN 135:236394
TI Synthesis of radioactively labeled epothilone derivatives and their biochemical and pharmaceutical usage
IN Klar, Ulrich; Gay, Juergen; Skuballa, Werner; Schwede, Wolfgang; Buchmann, Bernd; Bunte, Thomas; Lichtner, Rosemarie
PA Schering Aktiengesellschaft, Germany
SO PCT Int. Appl., 31 pp.
CODEN: PIXXD2
DT Patent
LA German
FAN.CNT 3

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001066154	A2	20010913	WO 2001-EP2699	20010309

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI DE 2000-10013363 A 20000309
OS MARPAT 135:236394
GI



I

AB The invention relates to novel radioactively labeled pharmacol. effective epothilone derivs. of general formula (I), where R1 represents O-PG and hydroxyl, where PG is a protective group; R2a, R2b are the same or different and represent, independent of one another, hydrogen C1-C10 alkyl, aryl, C7-C20 aralkyl or, together, represent a (CH2)m group, where m is equal to 1, 2, 3, 4 or 5; R3 represents a C2-C10 alkyl group, a C2-C10 alkenyl group or a C8-C20 aralkyl each containing 2n tritium atoms, where n equals 1 or 2; R4 represents O-PG and hydroxyl; R5 represents hydrogen C1-C10 alkyl, aryl, C7-C20 aralkyl and halogen; W-Z represents a CH2-CH2, CH2-O or O-CH2 group; R6 represents hydrogen, C1-C10 alkyl, aryl, C7-C20 aralkyl, (CH2)s-V and halogen, where s equals 1, 2, 3 or 4 and V represents O-PG, hydroxyl or halogen; R7, R8 each represent a hydrogen atom and, together, represent an addnl. bond or an oxygen atom; A represents aryl, C7-C20 aralkyl, and a group R10-CH=C9-, where R9 represents hydrogen, halogen, CN, C1-C20 alkyl, aryl, and C7-C20 aralkyl, and R10 represents hydrogen, C1-C20 alkyl-, aryl-, C7-C20 aralkyl, and; X-Y represents an O-C(=O), an O-CH2, a CH2-C(=O), an NR11-C(=O) and an

NR11-SO2 group, wherein R11 represents hydrogen and C1-C10 alkyl. The novel compds. of formula I are valuable pharmaceuticals and valuable diagnostic probes for elucidating, for example, active mechanisms and biochem., pharmacokinetic and/or pharmacodynamic processes.

L6 ANSWER 11 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:790507 CAPLUS
DN 133:362656
TI Preparation of 6-alkenyl-, 6-alkynyl- and 6-epoxyepothilone derivatives and their antitumor activity
IN Klar, Ulrich; Schwede, Wolfgang; Skuballa, Werner; Buchmann, Bernd; Hoffmann, Jens; Lichtner, Rosemarie
PA Schering Aktiengesellschaft, Germany
SO PCT Int. Appl., 298 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000066589	A1	20001109	WO 2000-IB657	20000501
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	DE 19921086	A1	20001102	DE 1999-19921086	19990430
	DE 19954228	A1	20010913	DE 1999-19954228	19991104
	DE 10015836	A1	20011011	DE 2000-10015836	20000327
	CA 2371226	AA	20001109	CA 2000-2371226	20000501
	BR 2000010190	A	20020108	BR 2000-10190	20000501
	EP 1173441	A1	20020123	EP 2000-922826	20000501
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, MC, PT, IE, SI, LT, LV, FI, RO				
	JP 2002543203	T2	20021217	JP 2000-615619	20000501
	EE 200100568	A	20030217	EE 2001-568	20000501
	NZ 514989	A	20040227	NZ 2000-514989	20000501
	AU 772750	B2	20040506	AU 2000-43103	20000501
	BG 106053	A	20020531	BG 2001-106053	20011026
	NO 2001005278	A	20011221	NO 2001-5278	20011029
PRAI	DE 1999-19921086	A1	19990430		
	DE 1999-19954228	A1	19991104		
	DE 2000-10015836	A1	20000327		
	DE 2000-10013363	A	20000309		
	WO 2000-IB657	W	20000501		

OS MARPAT 133:362656
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The antitumor agents, 6-alkenyl-, 6-alkynyl- and 6-epoxyepothilones I (R1a, R1b are same or different = H, C1-C10 alkyl, C6-C12 aryl, C7-C20 aralkyl each optionally substituted; or together = (CH2)m m = 1-5 or -CH2OCH2-; R2a(R2b replace a with b) = H, substituted alkyl, aryl, aralkyl, (CH2)ra-C.tplbond.(or =)C-(CH2)pa-R26a, Q, Q1 where n = 0-5; ra, rb = the same or different and = 0-4; pa, pb = the same or different and = 0-3; R3a = H, substituted alkyl, aryl or aralkyl; R3b = OH, OPG14; R14 = H, OR14a, halogen and R14a = H, SO2-alkyl, SO2-aryl or SO2-aralkyl; R4 = H, substituted alkyl, aryl or aralkyl, halogen, OR25, CN; R26a, R26b = same or different = H, substituted alkyl, aryl or aralkyl, C1-C10 acyl or

if pa or pb > 0, addnl. a group OR27; R25 = R27 = R22 = H, PG; R5 = H, substituted alkyl, aryl or aralkyl, (CH2)sT s = 1-4, T = OR22 or halogen; R6, R7 = H or together = bond or O; G = X=CR8 or bi- or tricyclic aryl radical and R8 = H, halogen, CN, or substituted alkyl, aryl or aralkyl; X = O, two OR23 groups, C2-C10-alkylene-α,ω-dioxy straight chain or branched; H/OR9 or CR10R11 group and R23 = alkyl radical, R9 = H, PG, R10,R11 = same or different = H, substituted alkyl, aryl or aralkyl, or together with the methylene are a 5-7 carbocyclic ring; D-E = CH2CH2 or OCH2; A = OC(O), OCH2, CH2C(O), NR29C(O), NR29SO2 and R29 = H, alkyl; Z = O or H/OR12 and R12 = H, PG) were prepared Thus II was prepared in a multistep synthesis starting from (4S)-4-(2-methyl-1-oxoprop-2-yl)-2,2-dimethyl[1,3]dioxane and 5-trimethylsilylpent-4-in-1-yl magnesium bromide. II had an IC50 value [nM] of 3.0 for the growth inhibition of human MCF-7 breast- and 75 for multidrug resistant NCI/ADR carcinoma cell lines with a selectivity of 2.5. The new epothilone derivs. interact with tubulin by stabilizing microtubuli that are formed. They are able to influence the cell-splitting in a phase-specific manner and are therefore useful in treating diseases or conditions associated with the need for cell growth, division and/or proliferation. Thus the epothilone derivs. are suitable for treating malignant tumors, e.g., ovarian, stomach, colon, adeno-, breast, lung, head and neck carcinomas, malignant melanoma, acute lymphocytic and myelocytic leukemia; and for anti-angiogenesis therapy as well as for treatment of chronic inflammatory diseases (such as psoriasis, arthritis).

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 12 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:772379 CAPLUS
DN 133:321769
TI 6-Alkenyl and 6-alkynyl derivatives of epothilone
IN Klar, Ulrich; Schwede, Wolfgang; Skuballa, Werner; Buchmann, Bernd; Hoffmann, Jens; Lichtner, Rosemarie
PA Schering A.-G., Germany
SO Ger. Offen., 18 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 3

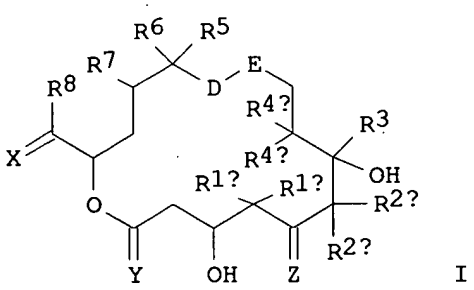
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 19921086	A1	20001102	DE 1999-19921086	19990430
	CA 2371226	AA	20001109	CA 2000-2371226	20000501
	WO 2000066589	A1	20001109	WO 2000-IB657	20000501
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	BR 2000010190	A	20020108	BR 2000-10190	20000501
	EP 1173441	A1	20020123	EP 2000-922826	20000501
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, MC, PT, IE, SI, LT, LV, FI, RO				
	JP 2002543203	T2	20021217	JP 2000-615619	20000501
	EE 200100568	A	20030217	EE 2001-568	20000501
	NZ 514989	A	20040227	NZ 2000-514989	20000501
	AU 772750	B2	20040506	AU 2000-43103	20000501
	BG 106053	A	20020531	BG 2001-106053	20011026
	NO 2001005278	A	20011221	NO 2001-5278	20011029
	ZA 2001009859	A	20030228	ZA 2001-9859	20011129
	US 2005113429	A1	20050526	US 2004-965802	20041018
PRAI	DE 1999-19921086	A	19990430		
	DE 1999-19954228	A	19991104		

DE 2000-10013363 A 20000309
DE 2000-10015836 A 20000327
WO 2000-IB657 W 20000501
OS MARPAT 133:321769
AB The title compds. were prepared by various combinations of 3 fragments making up the mols. Thus, [4S,7R,8S,9S,13Z,16S(E)]-4,8-dihydroxy-16-[1-methyl-2-(2-pyridyl)ethenyl]-1-oxa-5,5,9,13-tetramethyl-7-(3-butynyl)-13-cyclohexadecene-2,6-dione was prepared in several steps starting from (4S)-4-(2-methyl-1-oxo-2-propyl)-2,2-dimethyl[1,3]dioxane and 5-(trimethylsilyl)-4-pentynylmagnesium bromide.

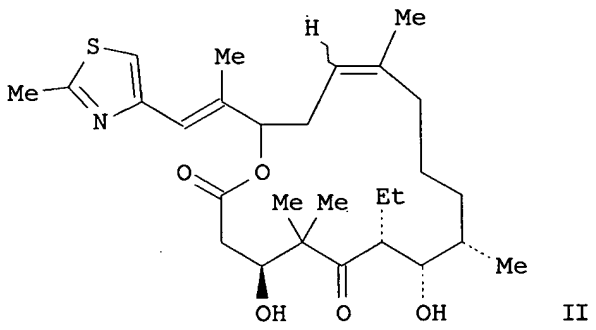
L6 ANSWER 13 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:738730 CAPLUS
DN 133:309795
TI Preparation of new epothilone derivatives and their pharmaceutical uses
IN Klar, Ulrich; Schwede, Wolfgang; Skuballa, Werner; Buchmann, Bernd; Schirner, Michael
PA Schering A.-G., Germany
SO Ger. Offen., 74 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI DE 19908767	A1	20001019	DE 1999-19908767	19990218
PRAI DE 1999-19908767		19990218		

OS MARPAT 133:309795
GI



I



II

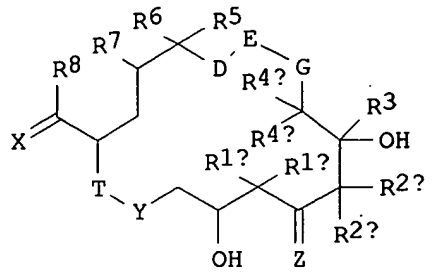
AB New epothilone derivs. I (R1a,R1b = R2a,R2b = same or different H, alkyl, aryl, aralkyl or (CH2)m,n m, n = 2-5; R3 = H, alkyl, aryl, aralkyl; R4a,R4b = same or different H, alkyl, aryl, aralkyl or (CH2)p = 2-5, CH2CH2, CH=CH, C.tplbond.C, epoxy, CH(OH)CH(OH), CH(OH)CH2; D-E = a group; R5 = H, alkyl, aryl, aralkyl; R6,R7 = H, bond, O; R8 = H, alkyl, aryl, aralkyl; X = O, OR23 alkylene-α,-ω-dioxy group straight or branched, OR9 or the CR10R11 group where R23 = alkyl, R9 = H or protecting group and R10,R11 = same or different H, alkyl, aryl, aralkyl or R10,R11 =

together with methylene are a 5-7 membered carbocyclic ring; Y = O or two H; Z = O or H/OR12 and R12 = H or a protecting group) were prepared Thus E- and Z-II were prepared via a multistep synthesis. I cooperate with tubulin by stabilizing formed microtubuli. I are able phase specifically to affect the cell division and are suitable for the treatment of malignant ovarian, stomach, colon, adeno, breast, lung, head and neck tumors, malignant melanomas, acute lymphocytic and myelocytic leukemia. Derivs. of I are suitable for use in anti-angiogenic therapy as well as for treating chronic inflammatory diseases (psoriasis, arthritis). In order to prevent uncontrolled cell proliferations and to improve the compatibility of medical implants I can be applied or incorporated into polymeric materials. I can be used alone or to achieve additive or synergistic effects in combination with further principles and substance classes applicable in tumor therapy.

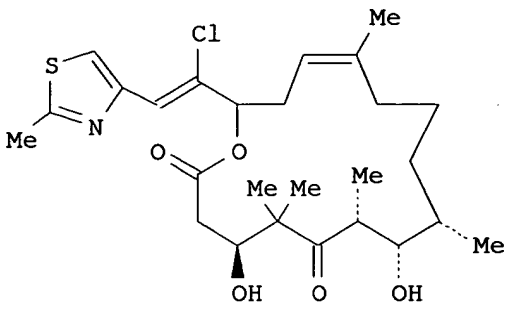
L6 ANSWER 14 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:592721 CAPLUS
DN 133:193028
TI Preparation of 16-halogen epothilone derivatives and their use as antitumor agents
IN Klar, Ulrich; Skuballa, Werner; Buchmann, Bernd; Schwede, Wolfgang; Schirner, Michael
PA Schering Aktiengesellschaft, Germany
SO PCT Int. Appl., 105 pp.
CODEN: PIXXD2
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000049021	A2	20000824	WO 2000-EP1333	20000218
	WO 2000049021	A3	20001228		
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	DE 19908765	A1	20000824	DE 1999-19908765	19990218
	DE 19954230	A1	20011115	DE 1999-19954230	19991104
	CA 2361278	AA	20000824	CA 2000-2361278	20000218
	EP 1150980	A2	20011107	EP 2000-909205	20000218
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	BR 2000008331	A	20020129	BR 2000-8331	20000218
	JP 2002537301	T2	20021105	JP 2000-599760	20000218
	EE 200100431	A	20021216	EE 2001-431	20000218
	NZ 513268	A	20040528	NZ 2000-513268	20000218
	BG 105802	A	20020329	BG 2001-105802	20010809
	NO 2001004013	A	20011018	NO 2001-4013	20010817
	ZA 2001007648	A	20030107	ZA 2001-7648	20010917
	US 6610736	B1	20030826	US 2001-913495	20011207
	US 2004014978	A1	20040122	US 2003-364337	20030212
	US 6930102	B2	20050816		
PRAI	DE 1999-19908765	A	19990218		
	DE 1999-19954230	A	19991104		
	WO 2000-EP1333	W	20000218		
	US 2001-913495	A3	20011207		

OS MARPAT 133:193028
GI



I



II

AB 16-Halogen epothilone derivs. I (R1a, R1b = R2a, R2b = H, C1-C10-alkyl, aryl, C7-C20-aralkyl, (CH2)m m = 2-5; R3 = H, C1-C10-alkyl, aryl, C7-C20-aralkyl; G = O, CH2; R4a, R4b = H, C1-C10-alkyl, aryl, C7-C20-aralkyl, (CH2)p p = 2-5; D-E = 1,2-ethanediyl, 1,2-ethenediyl, ethynyl, oxiranyl, 1,2-dihydroxy-1,2-ethanediyl, 1(2)-hydroxy-1,2-ethanediyl, CH2OH; R5 = H, C1-C10-alkyl, aryl, C7-C20-aralkyl, CO2H, CO2-alkyl, CH2OH, CH2O-alkyl, CH2O-acyl, CN, CH2NH2, CH2N(alkyl, acyl)1,2, CH2-halogen; R6, R7 = H, bond, O; R8 = halogen, CN; X = O, two alkoxy groups OR23, C2-C10-alkylene-α,ω-dihydroxy group straight or branched chain, H/OR9, CH10R11 where R23 = C1-C20-alkyl; R9 = H, or protecting group; R10, R11 = H, C1-C10-alkyl, aryl, C7-C20-aralkyl, 5-7 membered carbocyclic ring; T-Y = OC(=O), OCH2, CH2C(=O), NR24C(=O), NR24SO2; R24 = H, C1-C10-alkyl; Z = O, H/OR12 where R12 = H or protecting group) were prepared in addition to all possible stereoisomers and mixts. Thus II was prepared from 2-methyl-4-thiazolecarboxaldehyde in a multistep synthesis. The IC50 of II was 5.1 nM on MCF-7 breast tumor and had an IC50 of 37 nM on the multidrug resistant carcinoma NCI/ADR.

L6 ANSWER 15 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:592720 CAPLUS
DN 133:193027
TI Preparation of new epothilone derivatives having pharmaceutical application as antitumor agents
IN Klar, Ulrich; Schwede, Wolfgang; Buchmann, Bernd; Skuballa, Werner; Schirner, Michael; Grimm, Michael
PA Schering Aktiengesellschaft, Germany
SO PCT Int. Appl., 70 pp.
CODEN: PIXXD2
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000049020	A2	20000824	WO 2000-EP1332	20000218
	WO 2000049020	A3	20001228		

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,

DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

DE 19908763 A1 20000824 DE 1999-19908763 19990218

PRAI DE 1999-19908763 A 19990218

OS MARPAT 133:193027

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Epothilone derivs. I (R1a, R1b = H, C1-C10-alkyl, aryl, C7-C20-aralkyl; (CH2)m m = 1-5; CH2OCH2; R2a, R2b = H, C1-C10-alkyl, aryl, C7-C20-aralkyl; (CH2)n n = 2-5; E = A or B where t = 1-2, w = 1-2; G, G1 = H, halogen, CN, R24, C1-C20-acyl, C1-C20-acyloxy, OR24, CO2R24, N3, NO2, NR24aR24b; R24a, R24b = R24, (CH2)e e = 4-6; R24 = R3a = H, C1-C10-alkyl, aryl, C7-C20-aralkyl; R14 = H, OR14a, halogen; R3b = OPG14; R3b, R4a = bond; R4a, R4b = H, F, C1-C10-alkyl, aryl, C7-C20-aralkyl; R5 = H, C1-C10-alkyl, aryl, C7-C20-aralkyl, (CH2)s-A where s = 1-4, A = OR22, halogen; R22 = H, protecting group; R6,R7 = H, bond, O; R8 = H, F C1-C10-alkyl, aryl, C7-C20-aralkyl; X = O, two alkoxy groups OR23, C2-C10-alkylene-α,ω-dihydroxy group straight or branched, H/OR9, CR10R11 where R23 = C1-C20-alkyl; R9 = H, protecting group; R10, R11 = H C1-C10-alkyl, aryl, C7-C20-aralkyl or together are a 5-7 membered carbocyclic ring; Y = O or 2 H atoms; Z = O, H/OR12 where R12 = O, protecting group) were prepared in addition to all possible stereoisomers and mixts. Thus II was prepared from 1,3-bis(hydroxymethyl)benzene in a multistep synthesis. These epothilone derivs. interact with tubulin by stabilizing the formed microtubule. The compds. are able to influence the cell division in a phase-specific manner and are suited for treating malignant tumors, for example, ovarian cancer, gastric carcinoma, colon cancer, breast cancer, lung cancer, head and neck cancer, malignant melanoma, and acute lymphocytic and myelocytic leukemia. These derivs. are suited for use in anti-angiogenic therapy as well as for treating chronic inflammatory diseases (psoriasis, arthritis). These compds. can be applied or incorporated in polymeric materials to prevent uncontrolled cell proliferations and to improve the compatibility of medical implants. They can be used alone or in conjunction with addnl. constituents and substance classes to achieve additive or synergistic effects in tumor therapy.

L6 ANSWER 16 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:592719 CAPLUS

DN 133:193025

TI Preparation of new epothilone derivatives and their pharmaceutical uses

IN Klar, Ulrich; Schwede, Wolfgang; Skuballa, Werner; Buchmann, Bernd; Schirner, Michael; Menrad, Andreas

PA Schering A.-G., Germany

SO PCT Int. Appl., 54 pp.
CODEN: PIXXD2

DT Patent

LA German

FAN.CNT 1

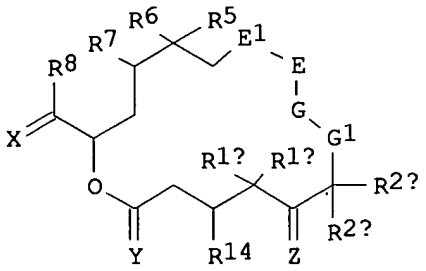
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000049019	A2	20000824	WO 2000-EP1331	20000218
WO 2000049019	A3	20010301		

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

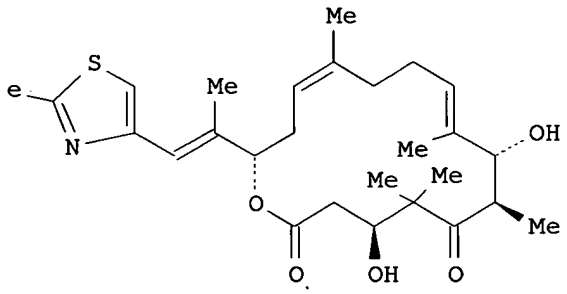
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

DE 19908760 A1 20000824 DE 1999-19908760 19990218

PRAI DE 1999-19908760 A 19990218
OS MARPAT 133:193025
GI



I



II

AB Epothilone derivs. I (R1a, R1b = H, C1-C10 alkyl, aryl; C7-C20 aralkyl; or together are (CH2)m m = 1-5; or CH2OCH2; R2a, R2b = H, C1-C10 alkyl, aryl; C7-C20 aralkyl; or together are (CH2)n n = 2-5; G1-G-E-E1 = CR3aR3b-CR4=CH-CH2; CR3aR3b-CD(T)R4-CHD(T)-CH2; (2,3-epoxy)-CR3aR3b-CR4OCH-CH2; CR3aR3b-COH(H)R4-CHOH(H)-CH2; CR3a=CR4-CH=CH where R3a = H, C1-C10 alkyl, aryl; C7-C20 aralkyl; R14 = H, OR14a, halogen, OSO2R14b; R3b = OPG14 or R3b, R14a = bond; R4 = H, C1-C10 alkyl, aryl; C7-C20 aralkyl; R5 = H, C1-C10 alkyl, aryl; C7-C20 aralkyl, (CH2)s-A s = 1-4, A = OR22 or halogen; R22 = H or protecting group; R6, R7 = H, O, bond; R8 = H, C1-C10 alkyl, aryl; C7-C20 aralkyl; X = O, OR23, C2-C10-alkylene-α,ω-dihydroxy which can be a straight chain or branched; H/OR9 or the group CR10R11 where R23 = C1-C20 alkyl; R9 = H or a protecting group; R10,R11 = H, C1-C20 alkyl, aryl; C7-C20 aralkyl or R10,R11 together form a 5-7 membered carbocyclic ring; Y = O or 2 H atoms; Z = O or H/OR12 where R12 = H or a protecting group) were prepared in addition to all possible stereoisomers and mixts. Thus II was prepared from (±)-1-acetoxypentan-4-one in a multistep synthesis. These epothilone derivs. interact with tubulin by stabilizing the microtubuli which are formed. They are able to influence the cell division phase-specifically and are suitable for treating malignant tumors such as cancers of the ovaries, stomach, colon, glands, breasts, lungs, head and neck, malignant melanoma and acute lymphocytic and myelocytic leukemia. These compds. are also suitable for anti-angiogenesis therapy and for treating chronic inflammatory diseases (psoriasis, arthritis) and can be deposited on or in polymer materials in order to prevent uncontrolled cell proliferations on medical implants and to improve the compatibility. These derivs. can be used alone or in combination with other principles and classes of substances that can be used in the therapy of tumors to achieve additive or synergistic effects.

L6 ANSWER 17 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:573798 CAPLUS
DN 133:177064
TI Preparation of epothilone derivatives useful as pharmaceuticals
IN Klar, Ulrich; Skuballa, Werner; Buchmann, Bernd; Schwede, Wolfgang; Schirner, Michael
PA Schering A.-G., Germany

SO PCT Int. Appl., 141 pp.
CODEN: PIXXD2
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000047584	A2	20000817	WO 2000-EP1104	20000211
	WO 2000047584	A3	20001228		
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	DE 19907480	A1	20000817	DE 1999-19907480	19990211
	CA 2360952	AA	20000817	CA 2000-2360952	20000211
	EP 1161430	A2	20011212	EP 2000-920433	20000211
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	BR 2000008206	A	20020219	BR 2000-8206	20000211
	JP 2002536450	T2	20021029	JP 2000-598504	20000211
	EE 200100422	A	20021216	EE 2001-422	20000211
	BG 105803	A	20020329	BG 2001-105803	20010809
	NO 2001003900	A	20011011	NO 2001-3900	20010810
	ZA 2001007458	A	20021210	ZA 2001-7458	20010910
PRAI	DE 1999-19907480	A	19990211		
	DE 1999-19954229	A	19991104		
	WO 2000-EP1104	W	20000211		

OS MARPAT 133:177064
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Novel epothilone derivs. I (R4 = R5 = H, C1-C10 alkyl, aryl, C7-C20 aralkyl; R6, R7 are each H, or together an addnl. bond or O; R8 = Me or H; R1a, R1b together = trimethylene; R2 = Ph, CH2Ph; X = 2-pyridyl, 2-methyl-4-thiazolyl, 2-methyl-4-oxazolyl; or R1a, R1b together = trimethylene; R2 = Me, Et, Pr; X = 2-pyridyl, 2-methyl-4-thiazolyl, 2-methyl-4-oxazolyl; or simultaneously R1a = R1b = Me; R2 = Me, Et, Pr; X = 2-pyridyl, 2-methyl-4-thiazolyl or 2-methyl-4-oxazolyl; and the N and/or S atoms in X can be in an oxidized form; and if R2 and R8 = Me, X can only be a 2-pyridyl residue which is optionally oxidized at the nitrogen atom) and all possible stereoisomers and their mixts were prepared Thus II was prepared in a multistep sequence from the starting materials III and IV. The novel compds. interact with tubulin by stabilizing the formed microtubuli. The compds. are able to influence the cell division in a phase-specific manner and are suited for treating malignant tumors, for example, ovarian cancer, gastric carcinoma, colon cancer, breast cancer, lung cancer, head and neck cancer, malignant melanoma, and acute lymphocytic and myelocytic leukemia. The inventive compds. are suited for use in anti-angiogenic therapy as well as for treating chronic inflammatory diseases (psoriasis, arthritis). In order to prevent uncontrolled cell proliferations and to improve the compatibility of medical implants, the inventive compds. can be applied or incorporated in polymeric materials. The inventive compds. can be used alone or, in order to achieve additive or synergistic effects, in conjunction with addnl. constituents and substance classes which can be use in tumor therapy.

L6 ANSWER 18 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:15195 CAPLUS

DN 132:64110
TI The preparation process, intermediate products and pharmaceutical use of epothilone derivatives
IN Buchmann, Bernd; Klar, Ulrich; Skuballa, Werner; Schwede, Wolfgang; Schirner, Michael; Menrad, Andreas
PA Schering A.-G., Germany
SO PCT Int. Appl., 86 pp.
CODEN: PIXXD2
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000000485	A1	20000106	WO 1999-EP4915	19990630
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	DE 19830060	A1	20000210	DE 1998-19830060	19980630
	DE 19923001	A1	20001116	DE 1999-19923001	19990513
	AU 9950369	A1	20000117	AU 1999-50369	19990630
PRAI	DE 1998-19830060	A	19980630		
	DE 1999-19923001	A	19990513		
	WO 1999-EP4915	W	19990630		

OS CASREACT 132:64110; MARPAT 132:64110
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

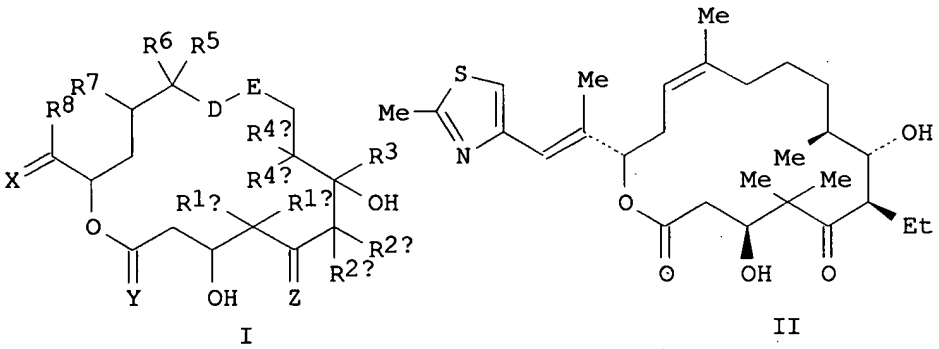
AB The invention relates to new epothilone derivs. I [R1a, R1b = H, C1-10-alkyl, aryl, C7-10-aralkyl; R1aR1b = (CH2)m, m = 2 - 5; R2a, R2b = H, C1-10-alkyl, aryl, C7-10-aralkyl; R2aR2b = (CH2)n, n = 2 - 5; R3 = H, C1-10-alkyl, aryl, C7-10-aralkyl; R4a, R4b = H, C1-10-alkyl, aryl, C7-10-aralkyl; R4aR4b = (CH2)m, m = 2 - 5; D-E = CH2CH2, CH:CH, C.tplbond.C, oxirane ring, CH(OH)CH(OH), CH(OH)CH2; R5 = C1-10-alkyl, aryl, C7-10-aralkyl; R6, R7 = H; R6R7 = O, bond; R8 = C1-10-alkyl, aryl, C7-10-aralkyl; R25 = H, C1-10-alkyl, C1-10-hydroxyalkyl, C1-10-haloalkyl; X = O, (OR9)2, C2-10-alkylene-α,ω-dioxy, CR11R12; CX = CH(OR10); R9 = C1-20-alkyl; R10 = H, protecting group; R11, R12 = H, C1-10-alkyl, aryl, C7-10-aralkyl; R11R12 = CH2, C5-7-carbocyclic ring; Y = O, CY = CH2; CZ = CH(OR13), R13 = H, protecting group] which are prepared via cyclization of ketones II [R15 = H, OH halogen, OR15a, OSO2R15b; R15a = H, SO2-alkyl, SO2-aryl, SO2-aralkyl, (CH2)o, CR16aR16b; R15b = H, C1-20-alkyl, aryl, C7-20-aralkyl; R16a, R16b = H, C1-10-alkyl, aryl, C7-20-aralkyl; R16aR16b = (CH2)q; o = 2 - 4; q = 3 - 6]. Thus, epothilone derivative III was prepared via macrolactonization of carboxylic acid IV with 2,4,6-trichlorobenzoyl chloride and Et3N in THF followed by deprotection with aqueous CF3CO2H in CH2Cl2. I cooperate with tubulin by stabilizing formed microtubuli.
RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 19 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1999:126888 CAPLUS
DN 130:196529
TI Preparation of new epothilone derivatives as pharmaceutical agents
IN Klar, Ulrich; Schwede, Wolfgang; Skuballa, Werner; Buchmann, Bernd; Schirner, Michael
PA Schering Aktiengesellschaft, Germany

SO PCT Int. Appl., 185 pp.
CODEN: PIXXD2
DT Patent
LA German
FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9907692	A2	19990218	WO 1998-EP5064	19980810
	WO 9907692	A3	19990514		
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DK, EE, ES, FI, GB, GE, GH, GM, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	DE 19735574	A1	19990211	DE 1997-19735574	19970809
	DE 19735575	A1	19990211	DE 1997-19735575	19970809
	DE 19735578	A1	19990211	DE 1997-19735578	19970809
	DE 19748928	A1	19990429	DE 1997-19748928	19971024
	DE 19749717	A1	19990506	DE 1997-19749717	19971031
	DE 19751200	A1	19990520	DE 1997-19751200	19971113
	DE 19813821	A1	19990923	DE 1998-19813821	19980320
	CA 2299608	AA	19990218	CA 1998-2299608	19980810
	AU 9893409	A1	19990301	AU 1998-93409	19980810
	EP 1005465	A2	20000607	EP 1998-946309	19980810
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	JP 2001512723	T2	20010828	JP 2000-506196	19980810
	ZA 9810403	A	20000515	ZA 1998-10403	19981113
	US 2003144523	A1	20030731	US 2000-485292	20000503
PRAI	DE 1997-19735574	A	19970809		
	DE 1997-19735575	A	19970809		
	DE 1997-19735578	A	19970809		
	DE 1997-19748928	A	19971024		
	DE 1997-19749717	A	19971031		
	DE 1997-19751200	A	19971113		
	DE 1998-19813821	A	19980320		
	WO 1998-EP5064	W	19980810		

OS MARPAT 130:196529
GI



I II

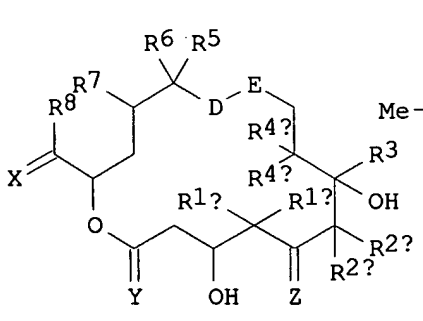
AB Epothilone derivs. of formula I [X = O, alkylene-α,ω-dioxy, two alkoxy groups, etc.; Y = O, H2; Z = O, (H, OH), (H, protected OH); R1a, R1b = H, alkyl, aryl, aralkyl, or together = (CH2)m where m = 2, 3, 4, 5; R2a, R2b = H, alkyl, aryl, aralkyl, or together = (CH2)n where n = 2, 3, 4, 5; when D-E = CH2CH2 or when Y = O, R2a or R2b may not be H/Me; R3 = H, alkyl, aryl, aralkyl; R4a, R4b = H, alkyl, aryl, aralkyl, or together = (CH2)p where p = 2, 3, 4, 5; D-E = CH2CH2, CH:CH, C.tplbond.C, 2,3-oxiranediyl, CH(OH)CH(OH), CH(OH)CH2; R5 = H, alkyl, aryl, aralkyl;

R6, R7 = H, together = a saturated bond or O; R8 = H, alkyl, aryl, aralkyl all of which may be substituted] are prepared Thus, the title compds. (4S,7R,8S,9S,13E,16S(E))- and (4S,7R,8S,9S,13Z,16S(E))-4,8-dihydroxy-7-ethyl-16-(1-methyl-2-(2-methyl-4-thiazolyl)ethenyl)-1-oxa-5,5,9,13-tetramethylcyclohexadec-13-en-2,6-dione (II) were prepared in many steps. The new compds. interact with tubulin by stabilizing formed microtubuli. They are capable of influencing cell division in a phase-specific manner and are suitable for the treatment of malignant tumors, such as ovarian, gastric, colon, breast, lung, head and neck carcinoma, adenocarcinoma, malignant melanoma, and acute lymphocytic and myelocytic leukemia. They are also suited for anti-angiogenesis therapy and for the treatment of chronic inflammatory diseases (psoriasis, arthritis). To prevent uncontrolled cell growth on, and for better tolerability of, medical implants, the derivs. can be introduced into or applied to polymeric materials. The compds. provided for in the invention can be used alone or, to achieve additive or synergistic effects, in combination with other principles and substance categories used in tumor therapy.

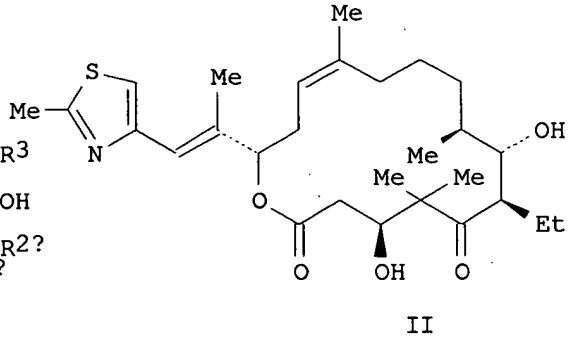
AN 1999:126888 CAPLUS
DN 130:196529
TI Preparation of new epothilone derivatives as pharmaceutical agents
IN Klar, Ulrich; Schwede, Wolfgang; Skuballa, Werner; Buchmann, Bernd; Schirner, Michael
PA Schering Aktiengesellschaft, Germany
SO PCT Int. Appl., 185 pp.
CODEN: PIXXD2
DT Patent
LA German
FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9907692	A2	19990218	WO 1998-EP5064	19980810
	WO 9907692	A3	19990514		
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DK, EE, ES, FI, GB, GE, GH, GM, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	DE 19735574	A1	19990211	DE 1997-19735574	19970809
	DE 19735575	A1	19990211	DE 1997-19735575	19970809
	DE 19735578	A1	19990211	DE 1997-19735578	19970809
	DE 19748928	A1	19990429	DE 1997-19748928	19971024
	DE 19749717	A1	19990506	DE 1997-19749717	19971031
	DE 19751200	A1	19990520	DE 1997-19751200	19971113
	DE 19813821	A1	19990923	DE 1998-19813821	19980320
	CA 2299608	AA	19990218	CA 1998-2299608	19980810
	AU 9893409	A1	19990301	AU 1998-93409	19980810
	EP 1005465	A2	20000607	EP 1998-946309	19980810
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	JP 2001512723	T2	20010828	JP 2000-506196	19980810
	ZA 9810403	A	20000515	ZA 1998-10403	19981113
	US 2003144523	A1	20030731	US 2000-485292	20000503
PRAI	DE 1997-19735574	A	19970809		
	DE 1997-19735575	A	19970809		
	DE 1997-19735578	A	19970809		
	DE 1997-19748928	A	19971024		
	DE 1997-19749717	A	19971031		
	DE 1997-19751200	A	19971113		
	DE 1998-19813821	A	19980320		
	WO 1998-EP5064	W	19980810		

OS MARPAT 130:196529
GI



I



II

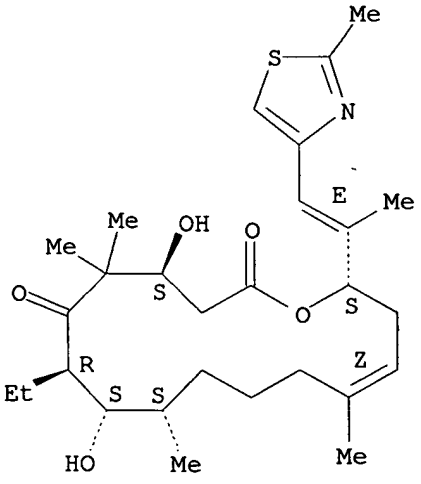
AB Epothilone derivs. of formula I [X = O, alkylene-α,ω-dioxy,

two alkoxy groups, etc.; Y = O, H2; Z = O, (H, OH), (H, protected OH); R1a, R1b = H, alkyl, aryl, aralkyl, or together = (CH2)m where m = 2, 3, 4, 5; R2a, R2b = H, alkyl, aryl, aralkyl, or together = (CH2)n where n = 2, 3, 4, 5; when D-E = CH2CH2 or when Y = O, R2a or R2b may not be H/Me; R3 = H, alkyl, aryl, aralkyl; R4a, R4b = H, alkyl, aryl, aralkyl, or together = (CH2)p where p = 2, 3, 4, 5; D-E = CH2CH2, CH:CH, C.tplbond.C, 2,3-oxiranediyl, CH(OH)CH(OH), CH(OH)CH2; R5 = H, alkyl, aryl, aralkyl; R6, R7 = H, together = a saturated bond or O; R8 = H, alkyl, aryl, aralkyl all of which may be substituted] are prepared Thus, the title compds. (4S,7R,8S,9S,13E,16S(E))- and (4S,7R,8S,9S,13Z,16S(E))-4,8-dihydroxy-7-ethyl-16-(1-methyl-2-(2-methyl-4-thiazolyl)ethenyl)-1-oxa-5,5,9,13-tetramethylcyclohexadec-13-en-2,6-dione (II) were prepared in many steps. The new compds. interact with tubulin by stabilizing formed microtubuli. They are capable of influencing cell division in a phase-specific manner and are suitable for the treatment of malignant tumors, such as ovarian, gastric, colon, breast, lung, head and neck carcinoma, adenocarcinoma, malignant melanoma, and acute lymphocytic and myelocytic leukemia. They are also suited for anti-angiogenesis therapy and for the treatment of chronic inflammatory diseases (psoriasis, arthritis). To prevent uncontrolled cell growth on, and for better tolerability of, medical implants, the derivs. can be introduced into or applied to polymeric materials. The compds. provided for in the invention can be used alone or, to achieve additive or synergistic effects, in combination with other principles and substance categories used in tumor therapy.

=> d hitstr 19

L6 ANSWER 19 OF 19 CAPLUS COPYRIGHT 2005 ACS on STN
IT **220773-43-3P 220773-46-6P 220773-47-7P**
220773-84-2P 220773-90-0P 220774-02-7P
220774-05-0P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of epothilone derivs. as antitumor agents)
RN 220773-43-3 CAPLUS
CN Oxacyclohexadec-13-ene-2,6-dione, 7-ethyl-4,8-dihydroxy-5,5,9,13-tetramethyl-16-[(1E)-1-methyl-2-(2-methyl-4-thiazolyl)ethenyl]-, (4S,7R,8S,9S,13Z,16S)- (9CI) (CA INDEX NAME)

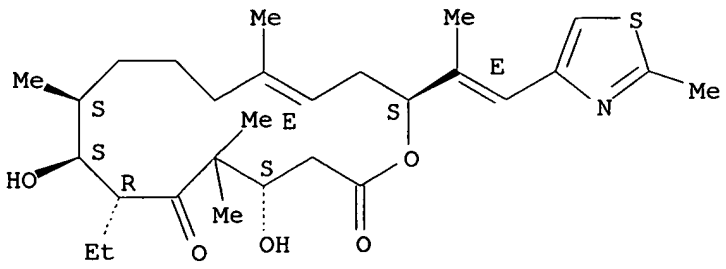
Absolute stereochemistry.
Double bond geometry as shown.



RN 220773-46-6 CAPLUS
CN Oxacyclohexadec-13-ene-2,6-dione, 7-ethyl-4,8-dihydroxy-5,5,9,13-tetramethyl-16-[(1E)-1-methyl-2-(2-methyl-4-thiazolyl)ethenyl]-,

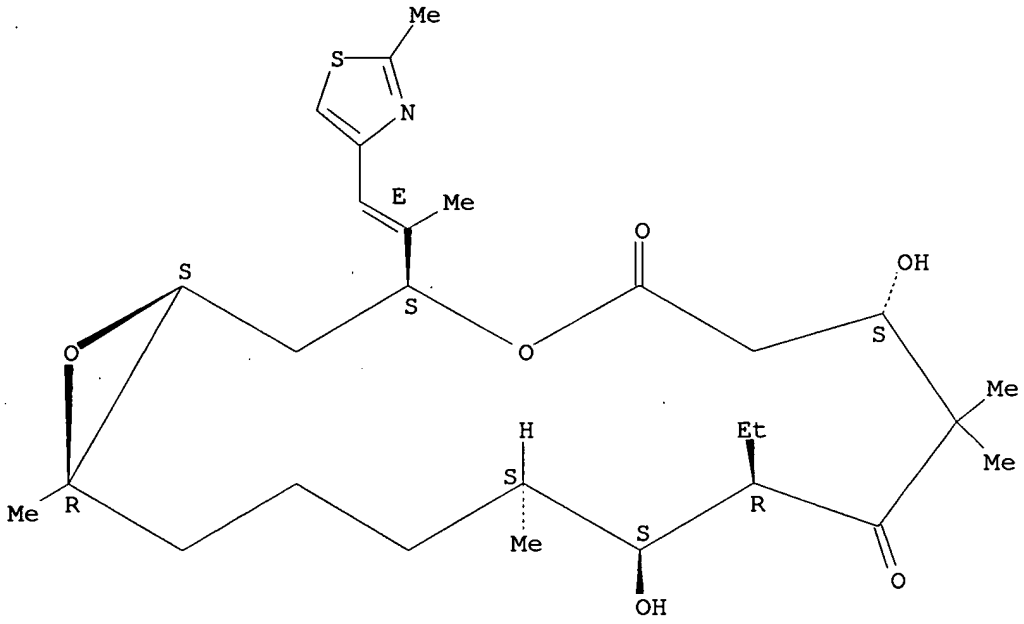
(4S,7R,8S,9S,13E,16S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



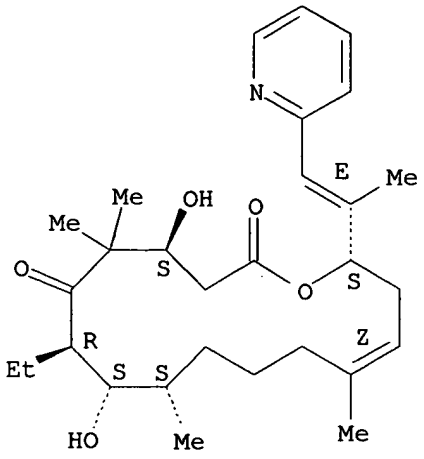
RN 220773-47-7 CAPLUS
CN 4,17-Dioxabicyclo[14.1.0]heptadecane-5,9-dione, 10-ethyl-7,11-dihydroxy-8,8,12,16-tetramethyl-3-[(1E)-1-methyl-2-(2-methyl-4-thiazolyl)ethenyl]-, (1S,3S,7S,10R,11S,12S,16R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



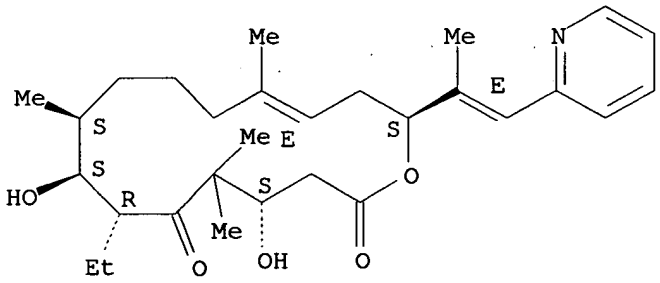
RN 220773-84-2 CAPLUS
CN Oxacyclohexadec-13-ene-2,6-dione, 7-ethyl-4,8-dihydroxy-5,5,9,13-tetramethyl-16-[(1E)-1-methyl-2-(2-pyridinyl)ethenyl]-, (4S,7R,8S,9S,13Z,16S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



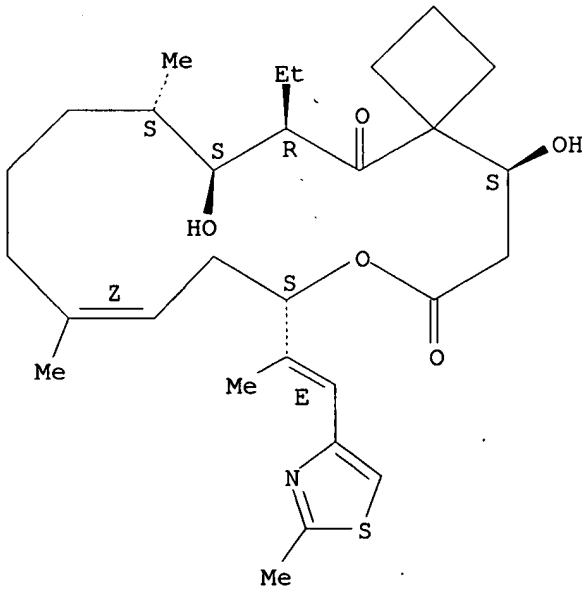
RN 220773-90-0 CAPLUS
CN Oxacyclohexadec-13-ene-2,6-dione, 7-ethyl-4,8-dihydroxy-5,5,9,13-tetramethyl-16-[(1E)-1-methyl-2-(2-pyridinyl)ethenyl]-, (4S,7R,8S,9S,13E,16S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



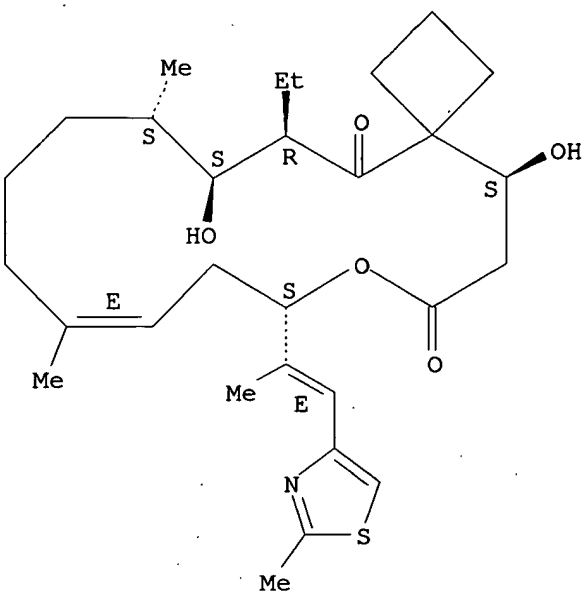
RN 220774-02-7 CAPLUS
CN 8-Oxaspiro[3.15]nonadec-11-ene-7,19-dione, 18-ethyl-5,17-dihydroxy-12,16-dimethyl-9-[(1E)-1-methyl-2-(2-methyl-4-thiazolyl)ethenyl]-, (5S,9S,11Z,16S,17S,18R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



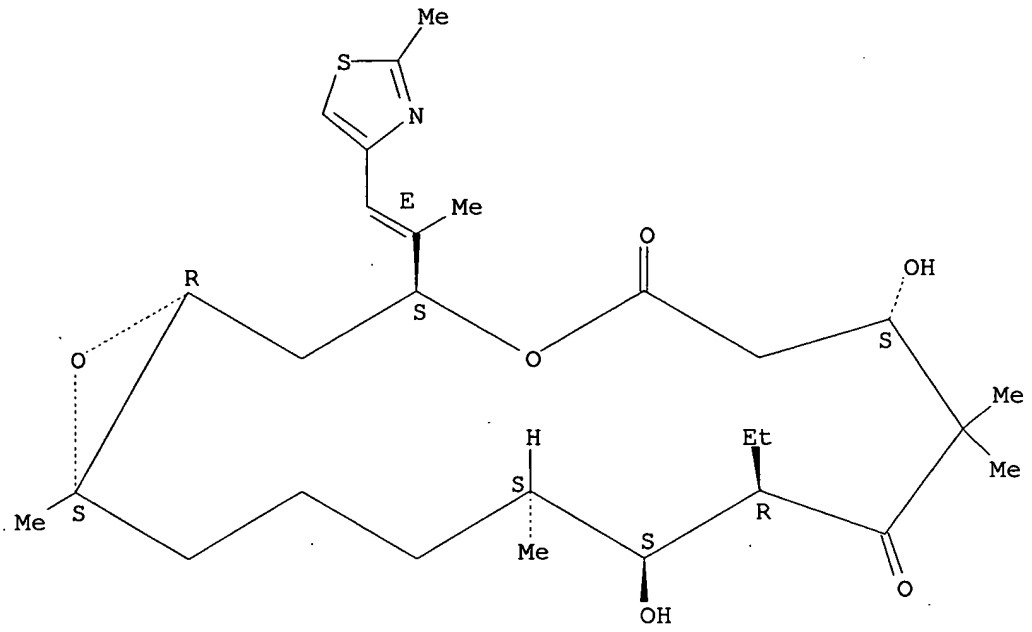
RN 220774-05-0 CAPLUS
CN 8-Oxaspiro[3.15]nonadec-11-ene-7,19-dione, 18-ethyl-5,17-dihydroxy-12,16-dimethyl-9-[(1E)-1-methyl-2-(2-methyl-4-thiazolyl)ethenyl]-, (5S,9S,11E,16S,17S,18R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as described by E or Z.



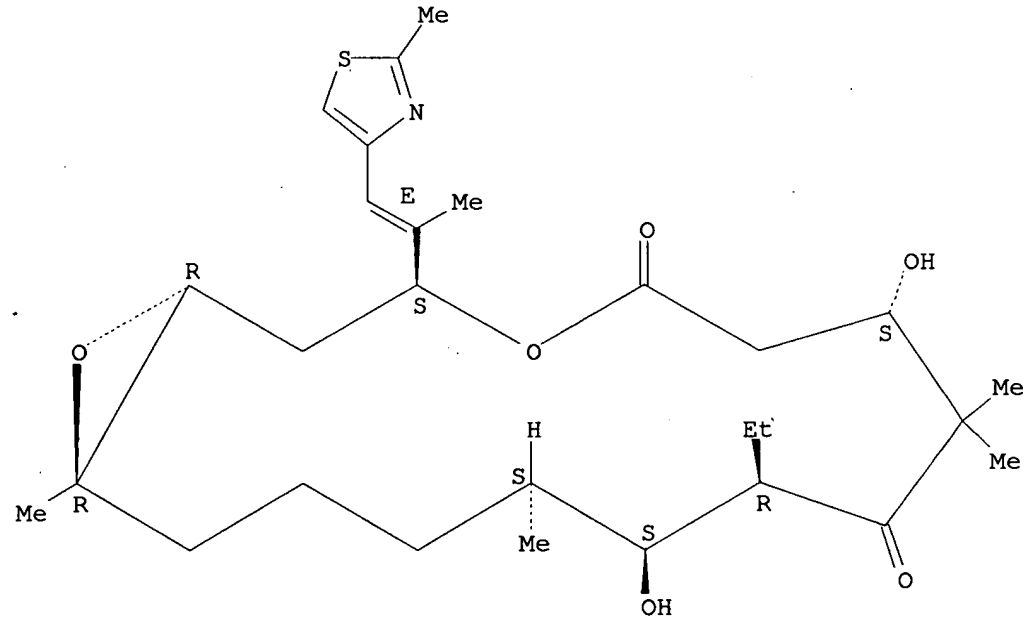
IT **220773-48-8P 220773-49-9P 220773-50-2P**
220773-61-5P 220773-85-3P 220773-86-4P
220773-87-5P 220773-88-6P 220773-89-7P
220773-91-1P 220773-92-2P 220773-94-4P
220773-95-5P 220774-03-8P 220774-04-9P
220774-06-1P 220774-07-2P 220776-11-4P
220776-13-6P 220776-15-8P 220776-17-0P
220776-19-2P 220776-20-5P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of epothilone derivs. as antitumor agents)
RN 220773-48-8 CAPLUS
CN 4,17-Dioxabicyclo[14.1.0]heptadecane-5,9-dione, 10-ethyl-7,11-dihydroxy-8,8,12,16-tetramethyl-3-[(1E)-1-methyl-2-(2-methyl-4-thiazolyl)ethenyl]-, (1R,3S,7S,10R,11S,12S,16S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



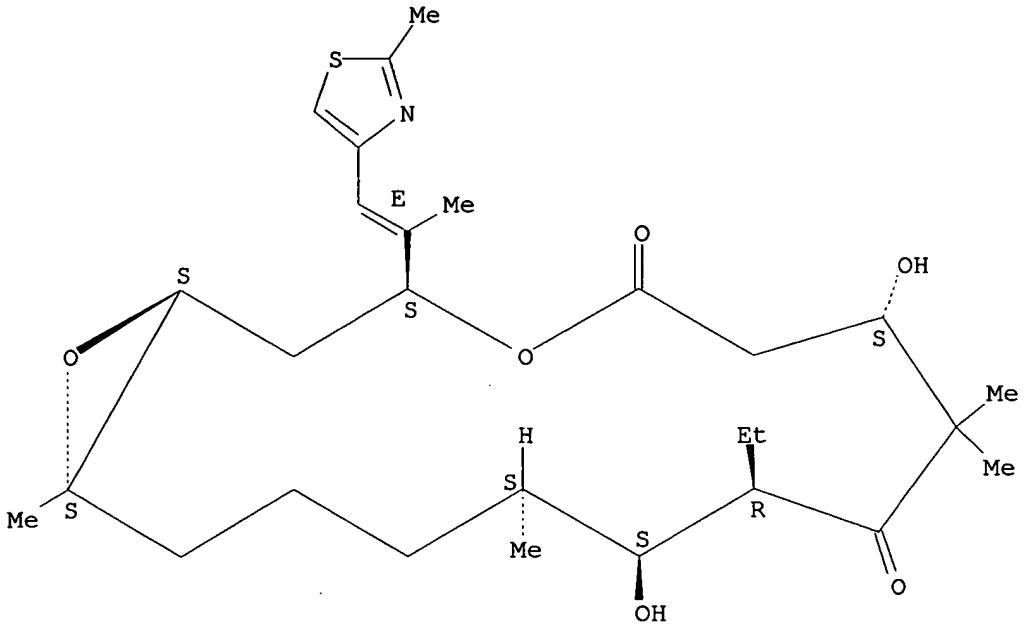
RN 220773-49-9 CAPLUS
CN 4,17-Dioxabicyclo[14.1.0]heptadecane-5,9-dione, 10-ethyl-7,11-dihydroxy-8,8,12,16-tetramethyl-3-[(1E)-1-methyl-2-(2-methyl-4-thiazolyl)ethenyl]-, (1R,3S,7S,10R,11S,12S,16R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



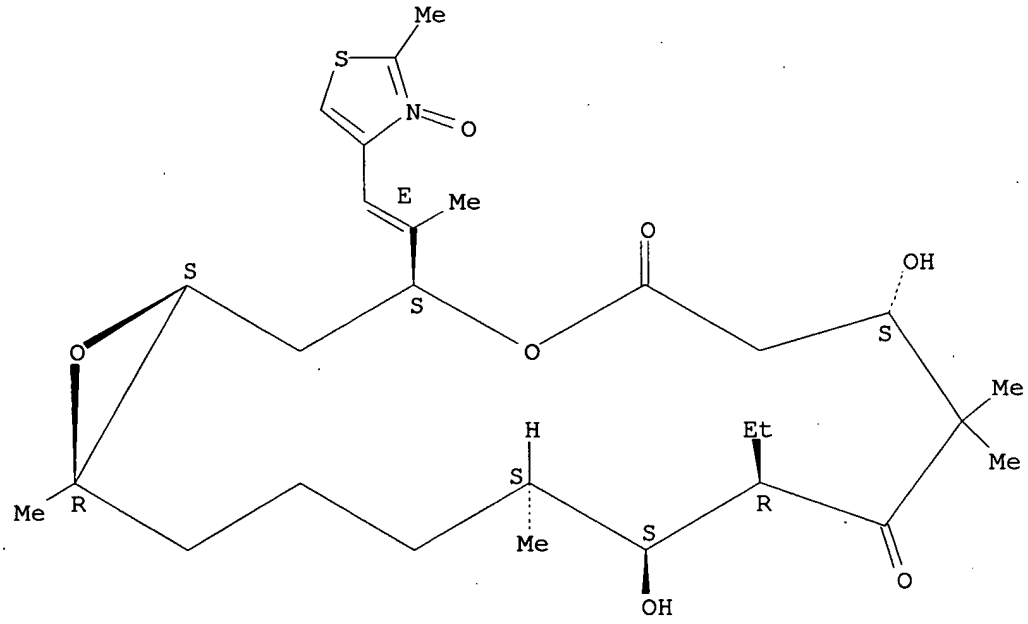
RN 220773-50-2 CAPLUS
CN 4,17-Dioxabicyclo[14.1.0]heptadecane-5,9-dione, 10-ethyl-7,11-dihydroxy-8,8,12,16-tetramethyl-3-[(1E)-1-methyl-2-(2-methyl-4-thiazolyl)ethenyl]-, (1S,3S,7S,10R,11S,12S,16S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



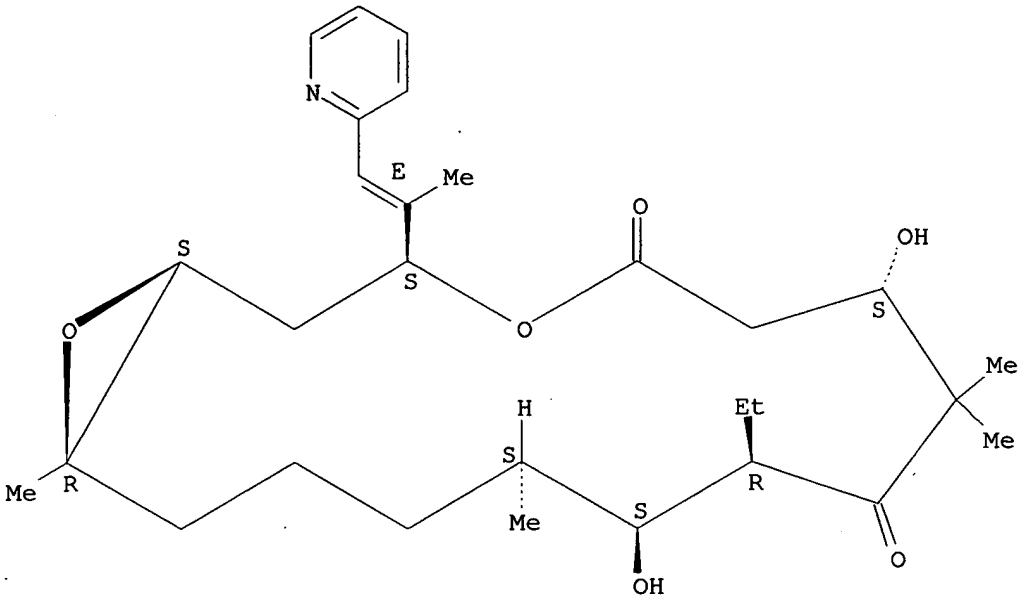
RN 220773-61-5 CAPLUS
CN 4,17-Dioxabicyclo[14.1.0]heptadecane-5,9-dione, 10-ethyl-7,11-dihydroxy-8,8,12,16-tetramethyl-3-[(1E)-1-methyl-2-(2-methyl-3-oxido-4-thiazolyl)ethenyl]-, (1S,3S,7S,10R,11S,12S,16R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



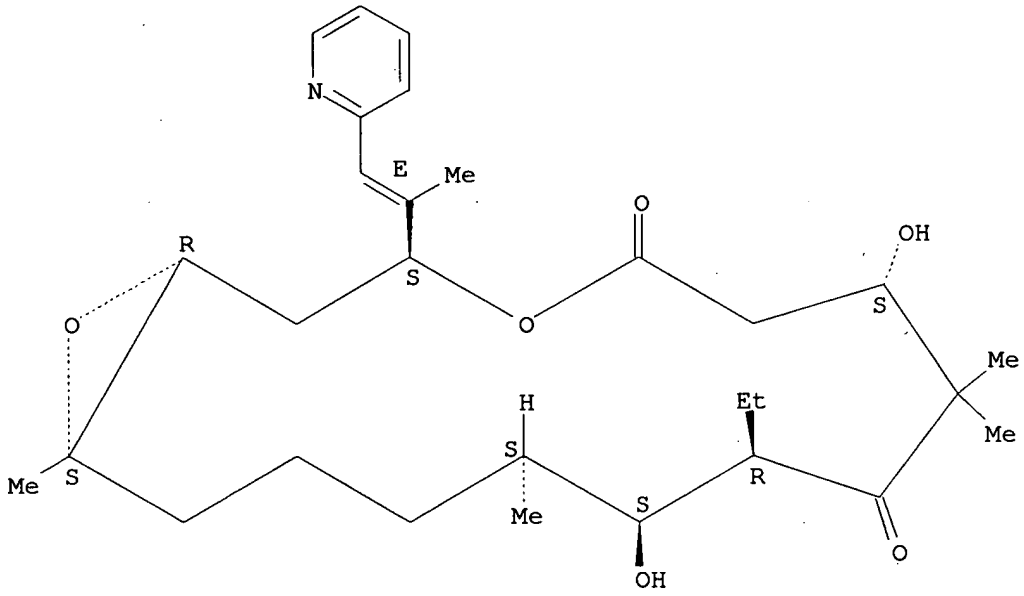
RN 220773-85-3 CAPLUS
CN 4,17-Dioxabicyclo[14.1.0]heptadecane-5,9-dione, 10-ethyl-7,11-dihydroxy-8,8,12,16-tetramethyl-3-[(1E)-1-methyl-2-(2-pyridinyl)ethenyl]-, (1S,3S,7S,10R,11S,12S,16R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



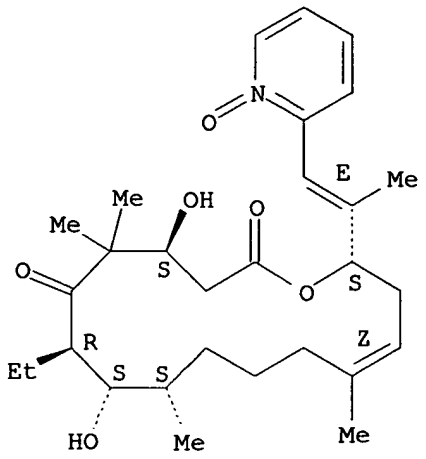
RN 220773-86-4 CAPLUS
CN 4,17-Dioxabicyclo[14.1.0]heptadecane-5,9-dione, 10-ethyl-7,11-dihydroxy-8,8,12,16-tetramethyl-3-[(1E)-1-methyl-2-(2-pyridinyl)ethenyl]-, (1R,3S,7S,10R,11S,12S,16S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



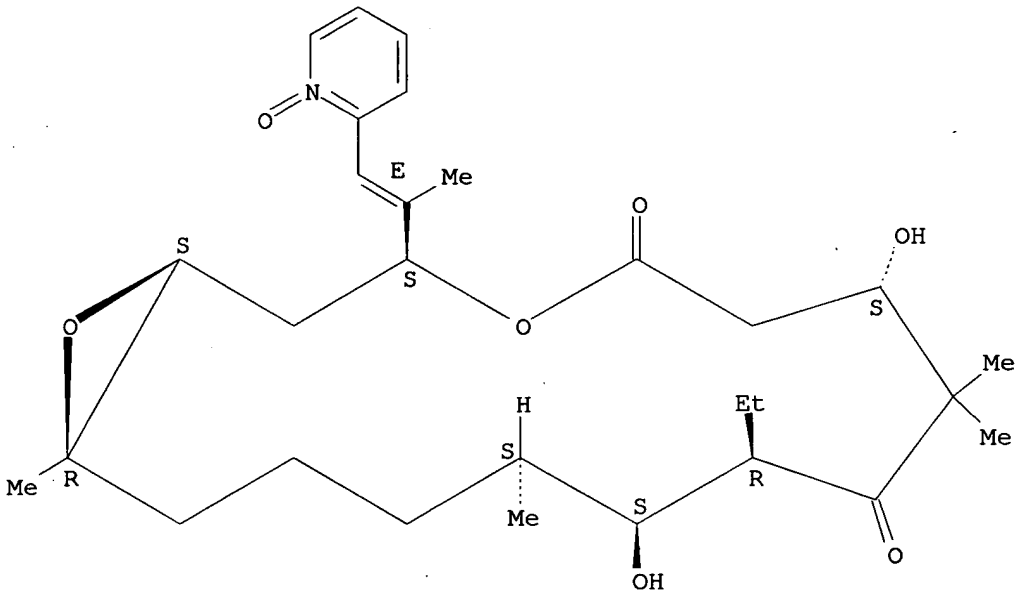
RN 220773-87-5 CAPLUS
CN Oxacyclohexadec-13-ene-2,6-dione, 7-ethyl-4,8-dihydroxy-5,5,9,13-tetramethyl-16-[(1E)-1-methyl-2-(1-oxido-2-pyridinyl)ethenyl]-, (4S,7R,8S,9S,13Z,16S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



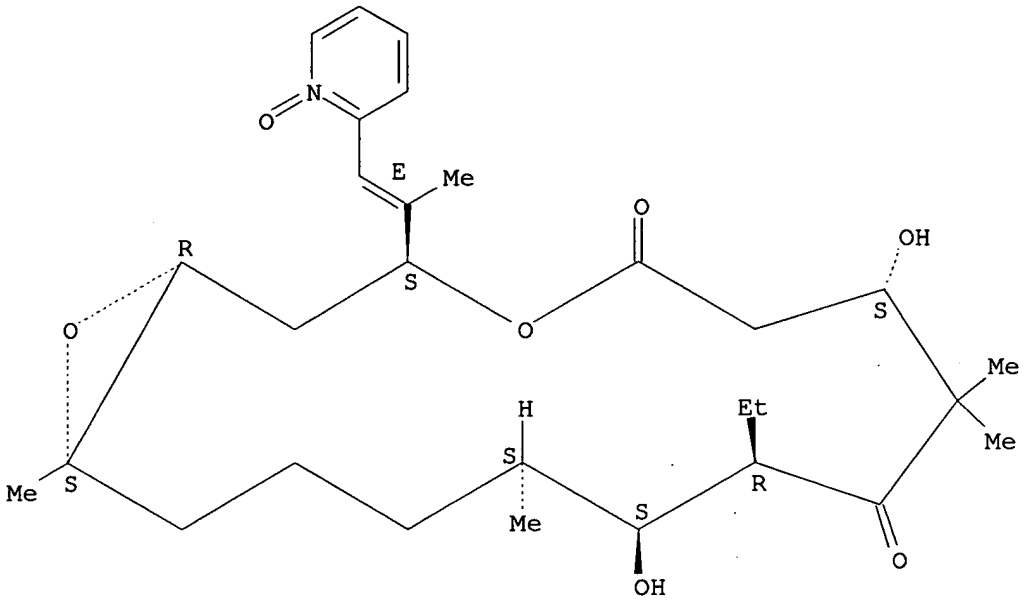
RN 220773-88-6 CAPLUS
CN 4,17-Dioxabicyclo[14.1.0]heptadecane-5,9-dione, 10-ethyl-7,11-dihydroxy-8,8,12,16-tetramethyl-3-[(1E)-1-methyl-2-(1-oxido-2-pyridinyl)ethenyl]-, (1S,3S,7S,10R,11S,12S,16R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



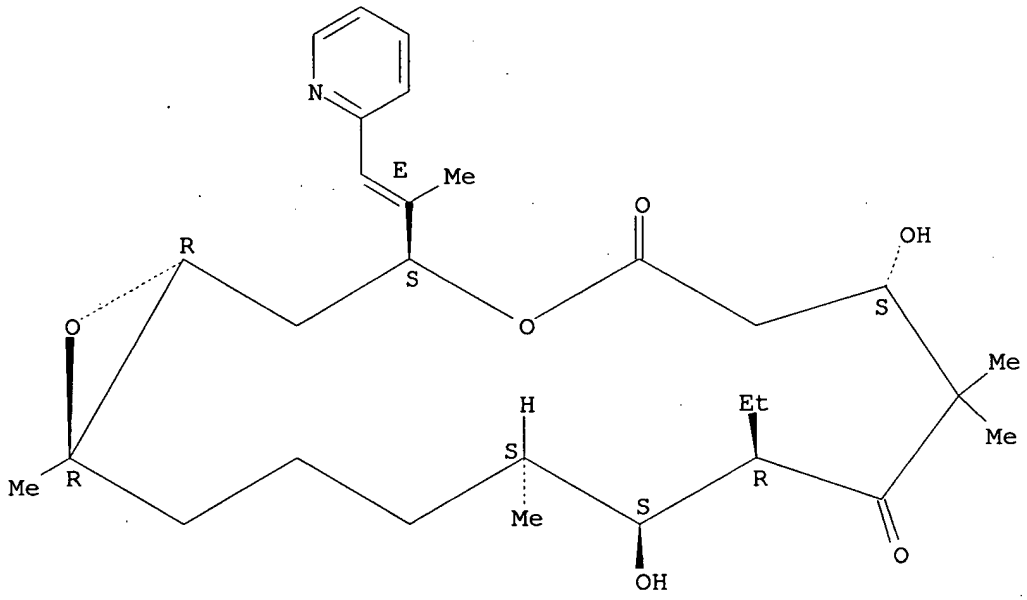
RN 220773-89-7 CAPLUS
CN 4,17-Dioxabicyclo[14.1.0]heptadecane-5,9-dione, 10-ethyl-7,11-dihydroxy-8,8,12,16-tetramethyl-3-[(1E)-1-methyl-2-(1-oxido-2-pyridinyl)ethenyl]-, (1R,3S,7S,10R,11S,12S,16S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



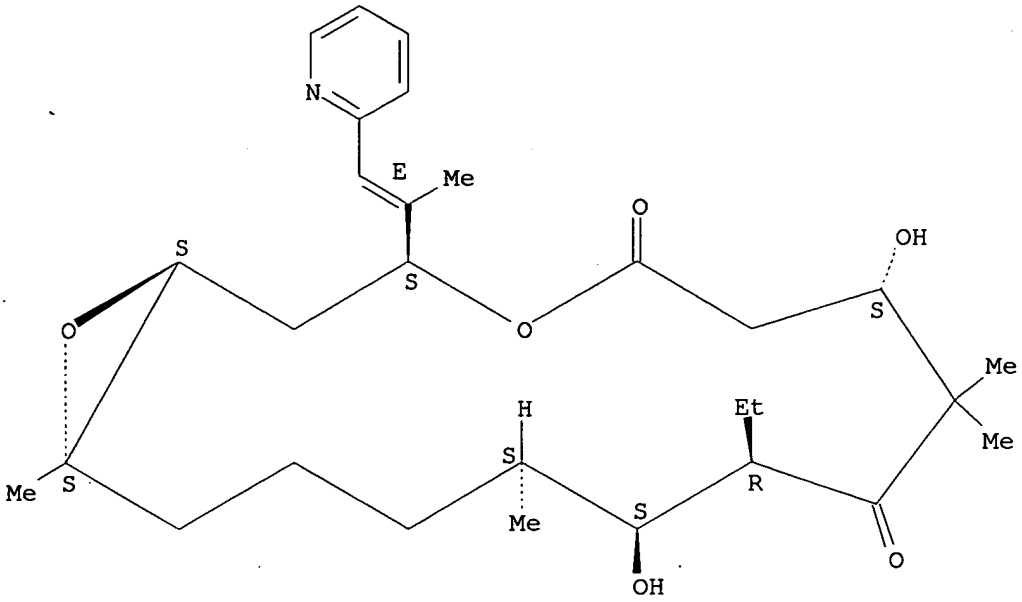
RN 220773-91-1 CAPLUS
CN 4,17-Dioxabicyclo[14.1.0]heptadecane-5,9-dione, 10-ethyl-7,11-dihydroxy-8,8,12,16-tetramethyl-3-[(1E)-1-methyl-2-(2-pyridinyl)ethenyl]-, (1R,3S,7S,10R,11S,12S,16R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



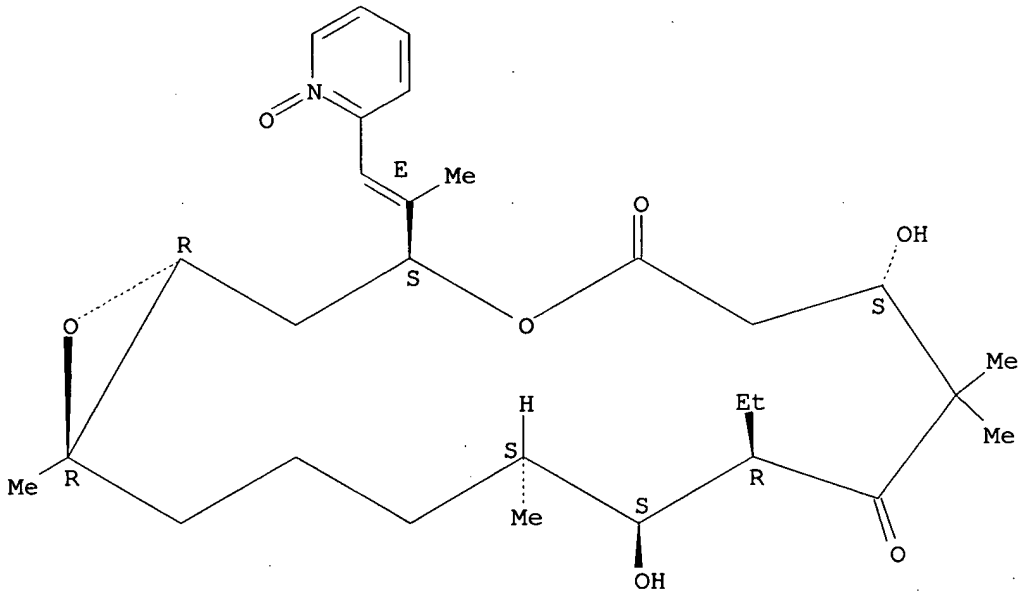
RN 220773-92-2 CAPLUS
CN 4,17-Dioxabicyclo[14.1.0]heptadecane-5,9-dione, 10-ethyl-7,11-dihydroxy-8,8,12,16-tetramethyl-3-[(1E)-1-methyl-2-(2-pyridinyl)ethenyl]-, (1S,3S,7S,10R,11S,12S,16S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



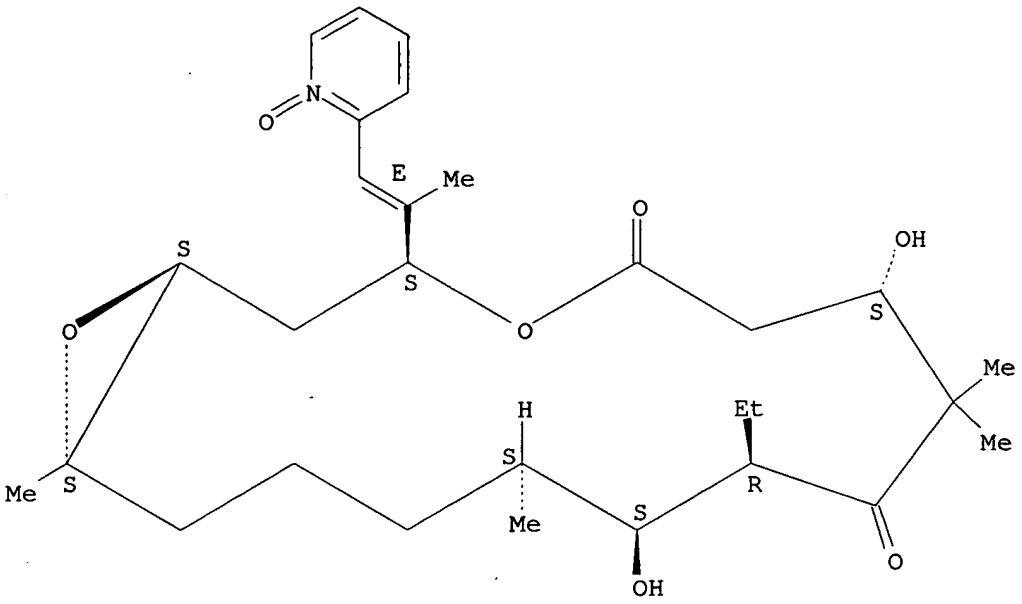
RN 220773-94-4 CAPLUS
CN 4,17-Dioxabicyclo[14.1.0]heptadecane-5,9-dione, 10-ethyl-7,11-dihydroxy-8,8,12,16-tetramethyl-3-[(1E)-1-methyl-2-(1-oxido-2-pyridinyl)ethenyl]-, (1R,3S,7S,10R,11S,12S,16R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



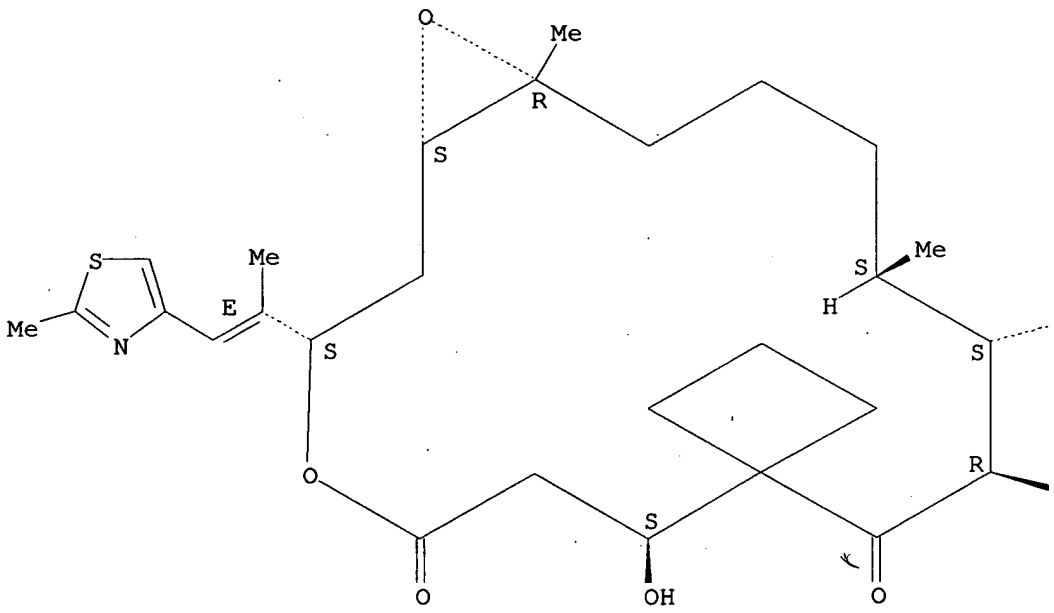
RN 220773-95-5 CAPLUS
CN 4,17-Dioxabicyclo[14.1.0]heptadecane-5,9-dione, 10-ethyl-7,11-dihydroxy-8,8,12,16-tetramethyl-3-[(1E)-1-methyl-2-(1-oxido-2-pyridinyl)ethenyl]-, (1S,3S,7S,10R,11S,12S,16S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



RN 220774-03-8 CAPLUS
CN Spiro[cyclobutane-1,8'-[4,17]dioxabicyclo[14.1.0]heptadecane]-5',9'-dione, 10'-ethyl-7',11'-dihydroxy-12',16'-dimethyl-3'-[(1E)-1-methyl-2-(2-methyl-4-thiazolyl)ethenyl]-, (1'S,3'S,7'S,10'R,11'S,12'S,16'R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

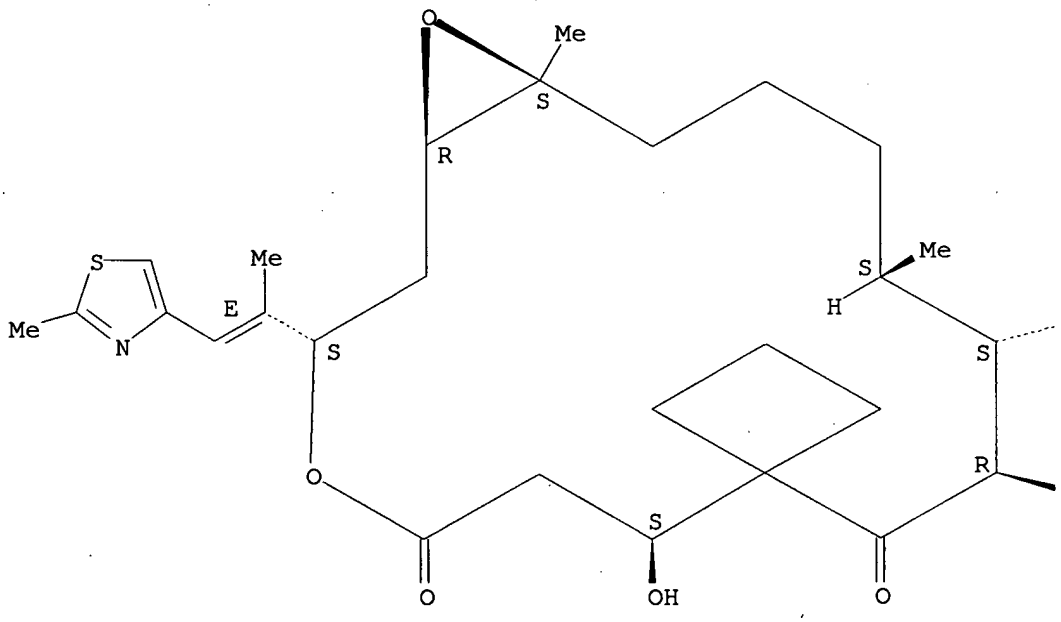


OH

Et

RN 220774-04-9 CAPLUS
CN Spiro[cyclobutane-1,8'-[4,17]dioxabicyclo[14.1.0]heptadecane]-5',9'-dione, 10'-ethyl-7',11'-dihydroxy-12',16'-dimethyl-3'-[(1E)-1-methyl-2-(2-methyl-4-thiazolyl)ethenyl]-, (1'R,3'S,7'S,10'R,11'S,12'S,16'S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

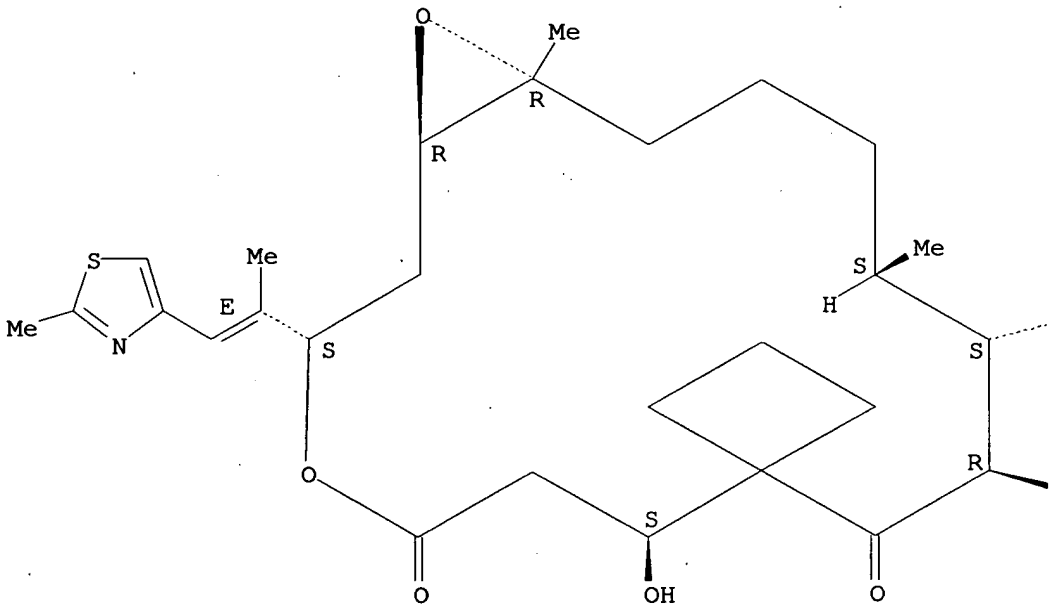


OH

Et

RN 220774-06-1 CAPLUS
CN Spiro[cyclobutane-1,8'-[4,17]dioxabicyclo[14.1.0]heptadecane]-5',9'-dione, 10'-ethyl-7',11'-dihydroxy-12',16'-dimethyl-3'-[(1E)-1-methyl-2-(2-methyl-4-thiazolyl)ethenyl]-, (1'R,3'S,7'S,10'R,11'S,12'S,16'R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

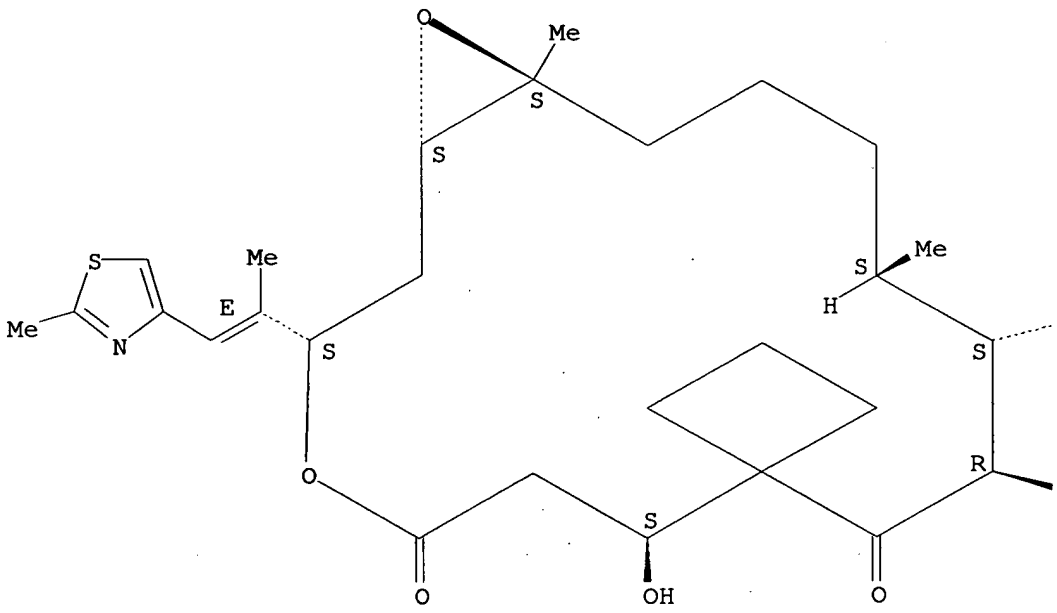


OH

Et

RN 220774-07-2 CAPLUS
CN Spiro[cyclobutane-1,8'-[4,17]dioxabicyclo[14.1.0]heptadecane]-5',9'-dione, 10'-ethyl-7',11'-dihydroxy-12',16'-dimethyl-3'-[(1E)-1-methyl-2-(2-methyl-4-thiazolyl)ethenyl]-, (1'S,3'S,7'S,10'R,11'S,12'S,16'S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

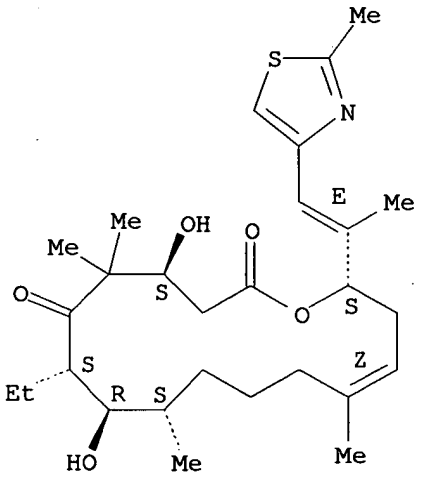


OH

Et

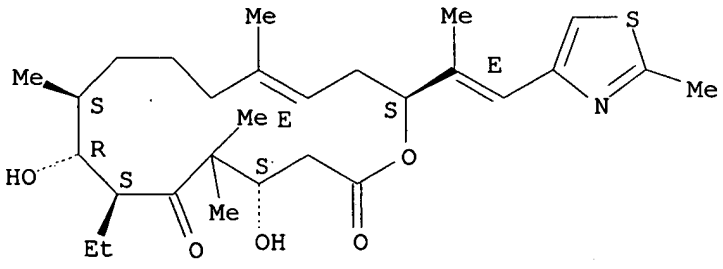
RN 220776-11-4 CAPLUS
CN Oxacyclohexadec-13-ene-2,6-dione, 7-ethyl-4,8-dihydroxy-5,5,9,13-tetramethyl-16-[(1E)-1-methyl-2-(2-methyl-4-thiazolyl)ethenyl]-, (4S,7S,8R,9S,13Z,16S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



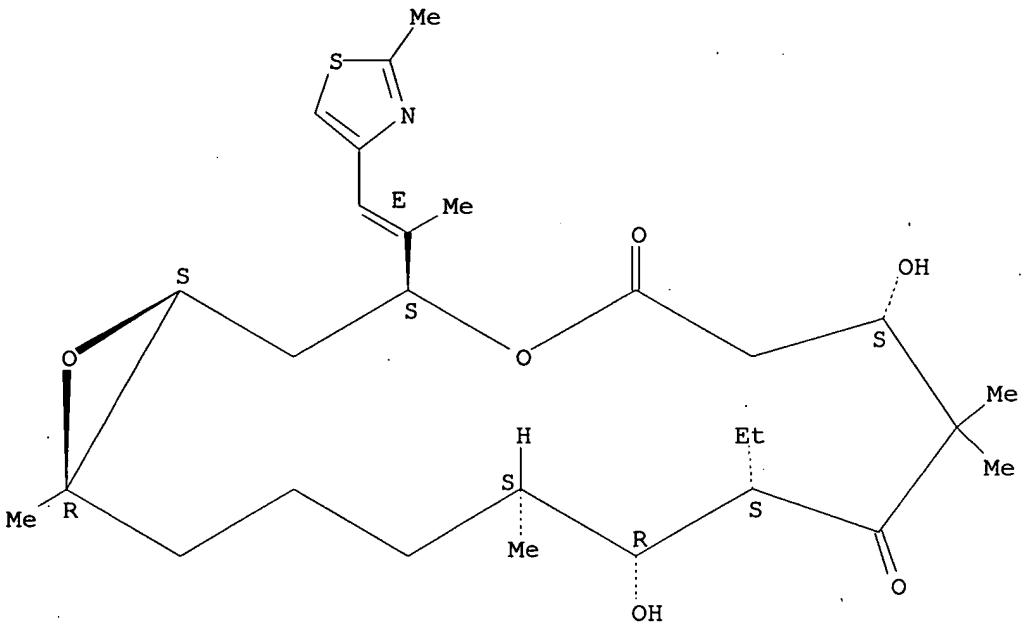
RN 220776-13-6 CAPLUS
CN Oxacyclohexadec-13-ene-2,6-dione, 7-ethyl-4,8-dihydroxy-5,5,9,13-tetramethyl-16-[(1E)-1-methyl-2-(2-methyl-4-thiazolyl)ethenyl]-, (4S,7S,8R,9S,13E,16S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



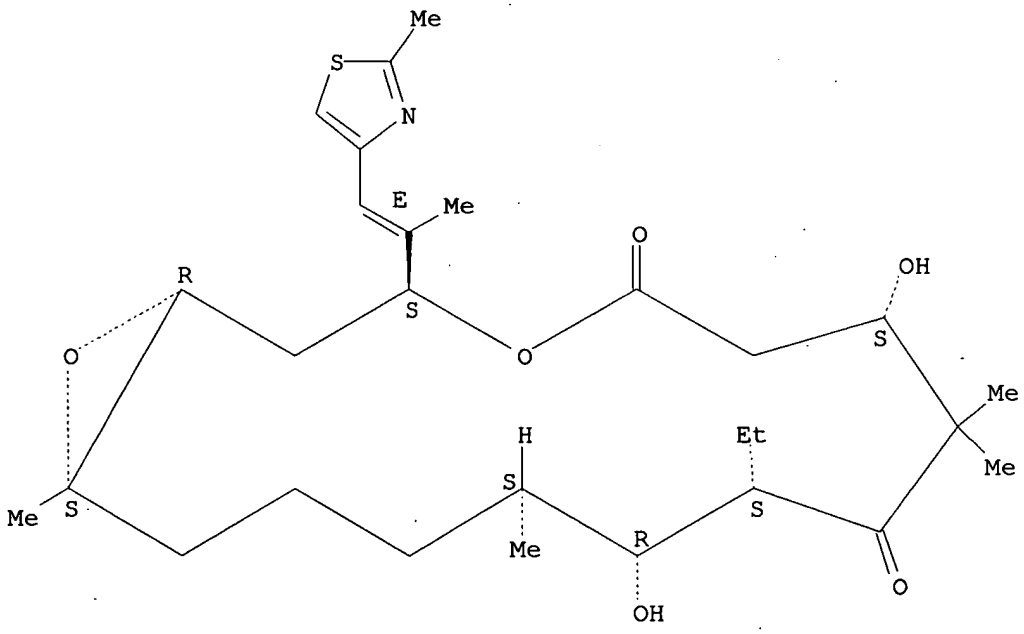
RN 220776-15-8 CAPLUS
CN 4,17-Dioxabicyclo[14.1.0]heptadecane-5,9-dione, 10-ethyl-7,11-dihydroxy-8,8,12,16-tetramethyl-3-[(1E)-1-methyl-2-(2-methyl-4-thiazolyl)ethenyl]-, (1S,3S,7S,10S,11R,12S,16R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



RN 220776-17-0 CAPLUS
CN 4,17-Dioxabicyclo[14.1.0]heptadecane-5,9-dione, 10-ethyl-7,11-dihydroxy-8,8,12,16-tetramethyl-3-[(1E)-1-methyl-2-(2-methyl-4-thiazolyl)ethenyl]-, (1R,3S,7S,10S,11R,12S,16S)- (9CI) (CA INDEX NAME)

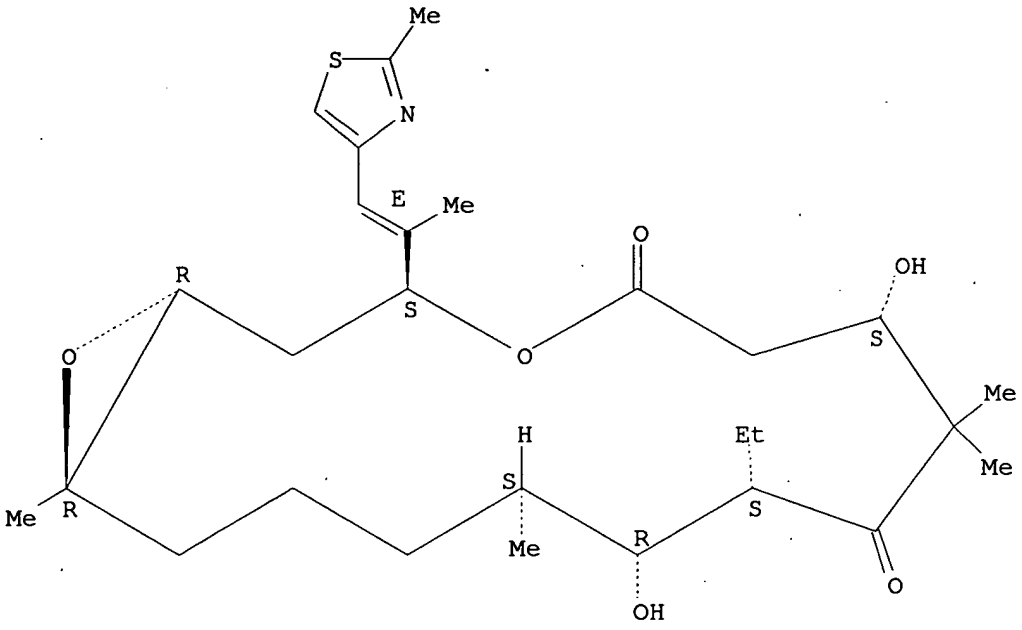
Absolute stereochemistry.
Double bond geometry as shown.



RN 220776-19-2 CAPLUS
CN 4,17-Dioxabicyclo[14.1.0]heptadecane-5,9-dione, 10-ethyl-7,11-dihydroxy-8,8,12,16-tetramethyl-3-[(1E)-1-methyl-2-(2-methyl-4-thiazolyl)ethenyl]-,

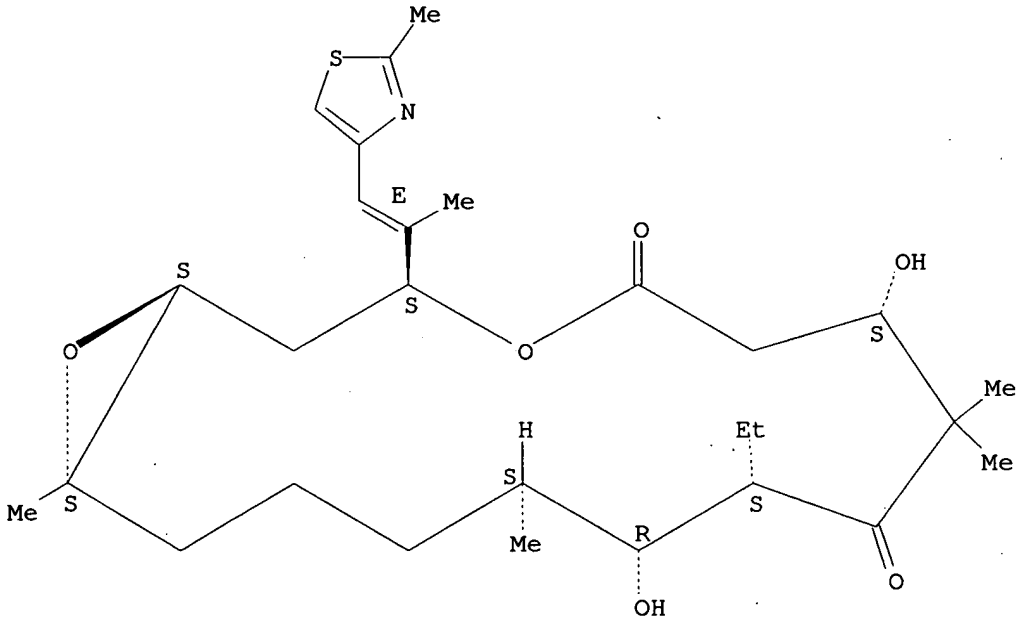
(1R,3S,7S,10S,11R,12S,16R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



RN 220776-20-5 CAPLUS
CN 4,17-Dioxabicyclo[14.1.0]heptadecane-5,9-dione, 10-ethyl-7,11-dihydroxy-8,8,12,16-tetramethyl-3-[(1E)-1-methyl-2-(2-methyl-4-thiazolyl)ethenyl]-, (1S,3S,7S,10S,11R,12S,16S)- (9CI) (CA INDEX NAME)

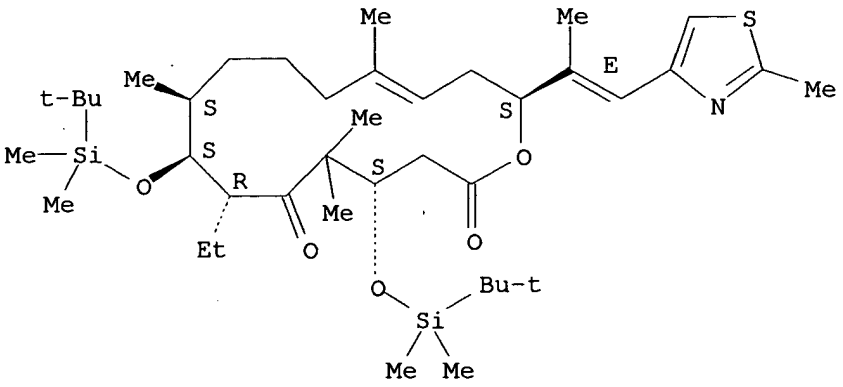
Absolute stereochemistry.
Double bond geometry as shown.



IT **220774-32-3P 220775-35-9P 220775-37-1P 220775-73-5P 220775-75-7P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of epothilone derivs. as antitumor agents)
RN 220774-32-3 CAPLUS

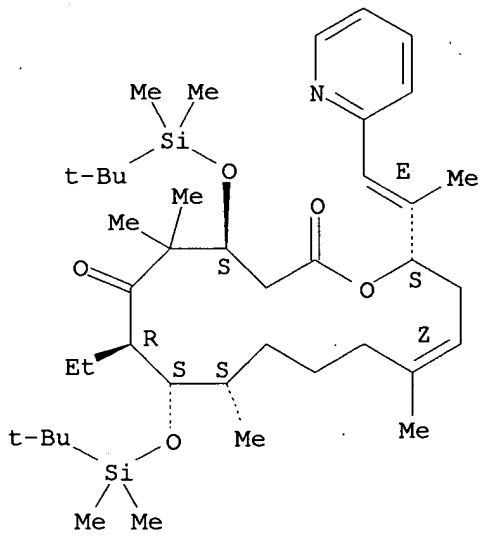
CN Oxacyclohexadec-13-ene-2,6-dione, 4,8-bis[[(1,1-dimethylethyl)dimethylsilyl]oxy]-7-ethyl-5,5,9,13-tetramethyl-16-[(1E)-1-methyl-2-(2-methyl-4-thiazolyl)ethenyl]-, (4S,7R,8S,9S,16S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as described by E or Z.



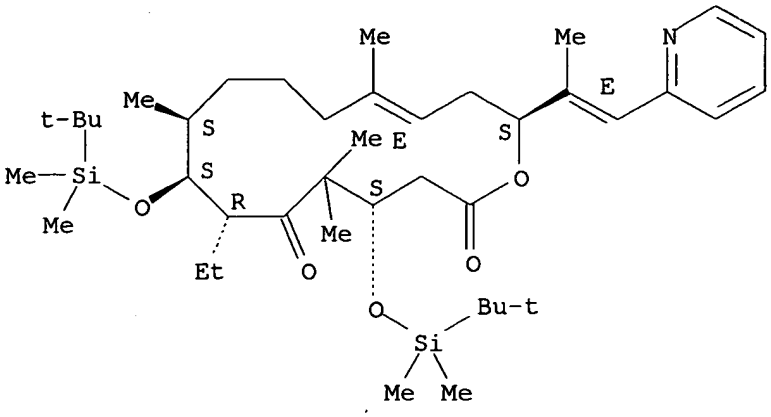
RN 220775-35-9 CAPLUS
CN Oxacyclohexadec-13-ene-2,6-dione, 4,8-bis[[(1,1-dimethylethyl)dimethylsilyl]oxy]-7-ethyl-5,5,9,13-tetramethyl-16-[(1E)-1-methyl-2-(2-pyridinyl)ethenyl]-, (4S,7R,8S,9S,13Z,16S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



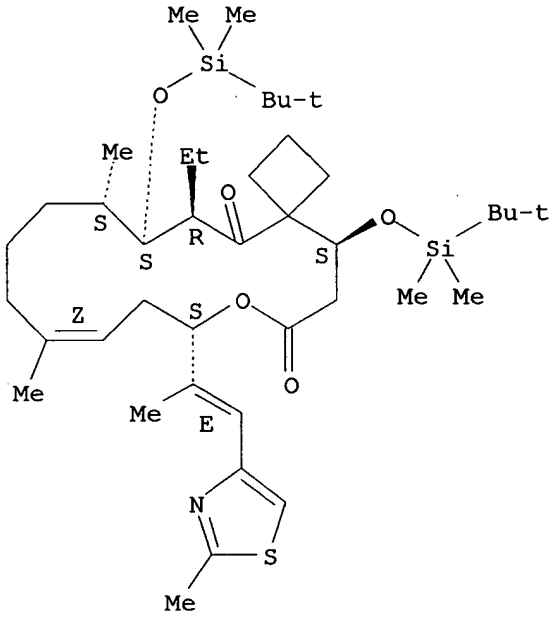
RN 220775-37-1 CAPLUS
CN Oxacyclohexadec-13-ene-2,6-dione, 4,8-bis[[(1,1-dimethylethyl)dimethylsilyl]oxy]-7-ethyl-5,5,9,13-tetramethyl-16-[(1E)-1-methyl-2-(2-pyridinyl)ethenyl]-, (4S,7R,8S,9S,13E,16S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



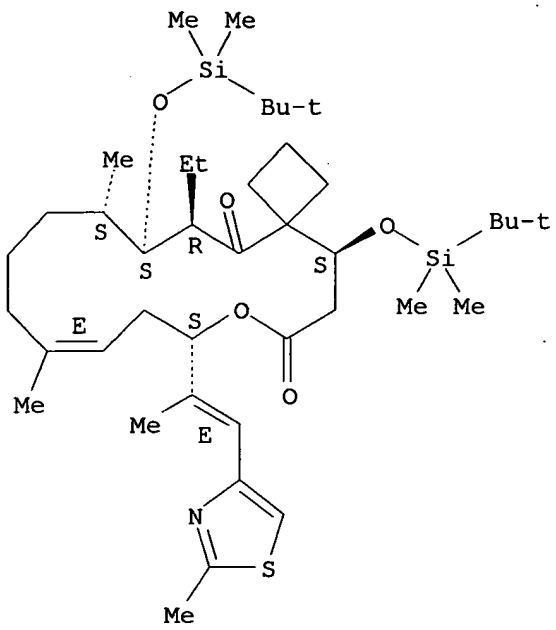
RN 220775-73-5 CAPLUS
CN 8-Oxaspiro[3.15]nonadec-11-ene-7,19-dione, 5,17-bis[[(1,1-dimethylethyl)dimethylsilyl]oxy]-18-ethyl-12,16-dimethyl-9-[(1E)-1-methyl-2-(2-methyl-4-thiazolyl)ethenyl]-, (5S,9S,11Z,16S,17S,18R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



RN 220775-75-7 CAPLUS
CN 8-Oxaspiro[3.15]nonadec-11-ene-7,19-dione, 5,17-bis[[(1,1-dimethylethyl)dimethylsilyl]oxy]-18-ethyl-12,16-dimethyl-9-[(1E)-1-methyl-2-(2-methyl-4-thiazolyl)ethenyl]-, (5S,9S,11E,16S,17S,18R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as described by E or Z.


Me
Me
Si
Bu-t
O
Me
Et
O
S
R
S
S
O
Bu-t
Si
Me
Me
E
S
O
O
Me
Me
E
N
S
Me